(54) Title: ON-LINE VEHICLE APPRAISAL SYSTEM

(57) **Abstract:** A web site and an associated business method that enables on-line appraisal of a particular vehicle and assigns an actual cash value to that particular vehicle so that the actual trade-in value may be included as part of the on-line purchase of another new or used vehicle. A mechanism is provided whereby on-line vehicle retailers may take into account the value of used vehicle trade-ins so that the entire vehicle purchasing transaction may be completed on-line from the comfort of the purchaser's home. The web site prompts the customer to input all of the information that is needed to make a complete appraisal, including detailed vehicle condition information, and provides a value that is accurate for the customer's vehicle. Once the appraisal is complete, a comprehensive summary page or "certificate" is printed that is submitted as part of the on-line purchase transaction. Then, when the new vehicle is delivered, the summary sheet is compared to the actual vehicle provided for trade-in and any final adjustments based on objective criteria are made as appropriate. The vehicle appraisal web site of the invention may also be used to perform inventory management of used vehicles, including providing a method of charging the lessee of each vehicle returned from lease for the differential between (a) the difference between the prelease and postlease condition reports and (b) the lease value paid. On-line sales of used vehicles may also be facilitated by posting the condition reports on a web site with at least one picture of the used vehicle for sale.

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ON-LINE VEHICLE APPRAISAL SYSTEM

BACKGROUND OF THE INVENTION

Field of the Invention

The present invention relates generally to a vehicle appraisal system. More particularly, the present invention relates to a vehicle appraisal system accessible via the Internet that permits users to establish the exact trade-in value of their individual used vehicles (as opposed to approximate values) and to an associated business method that permits on-line vehicle retailers to take into account the value of used vehicle trade-ins so that the entire vehicle purchasing transaction may be completed on-line and that permits vehicle leasing agencies to monitor the condition and value of its used vehicle inventories.

Description of the Prior Art

Today, billions of dollars worth of new automobiles are being purchased with the assistance of the Internet. It is estimated that today over 25% of automobile purchasers use the Internet at least to gather information during the purchase of a new automobile. Generally speaking, the types of web sites available to assist on-line automobile shoppers are referral sites and purchase sites. At referral sites, such as CarPoint, visitors to the web site are provided information about vehicles of interest and also provided the contact information for a local dealer for a test drive and additional purchase information. The customer then contacts the local dealer to complete the purchase transaction. While such referral sites facilitate connecting the customer to the local dealer, such sites do not provide the added convenience of complete on-line purchasing with the attendant cost savings to the purchaser. This approach also keeps the control over the customers in the hands of the dealers. Purchase sites such as Autobytel.com, on the other hand, further permit visitors to their web site to complete the purchase transaction on-line, including the financing of the vehicle. The vehicle is later delivered to the customer. While such purchase sites permit the transaction to be completed on-line without dealer intervention, such sites fail to account for one of the major financial components of the overwhelming majority of vehicle purchase transactions: the vehicle trade-in. Typically, the customer must separately handle the sale of his or her used vehicle, thus adding significant burden to the customer in completing the new vehicle purchase.

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The primary obstacle to the inclusion of the used vehicle trade-in value in the on-line vehicle purchase transaction is the inability of the on-line vehicle merchant to assess the value of the used vehicle trade-in without actually examining the vehicle. The used vehicle valuation also is a crucial point in the new vehicle purchase process where the customer may decide that he or she has not gotten a sufficient trade-in value to justify the purchase of the desired vehicle and thus abort the purchase transaction. It is thus desired to educate the potential vehicle purchaser as to the value of his or her trade-in vehicle early in the process so that this financial component of the new vehicle purchase is set.

At present, several companies provide on-line used car appraisals at web sites that give the customer a *general idea* of the value of his or her trade-in. For example, Kelly Blue Book, NADA, and Edmunds operate web sites that permit visitors to evaluate their pre-owned vehicles on line and to arrive at an estimated cash value. Each site follows the same basic format.

Kelly Blue Book

The Kelly Blue Book web site initially asks the customer to enter his or her zip code so that the estimated value may be regionalized to the customer's region and then asks the customer for the make, model and year. The web site then accesses a database to identify the trim (convertible, 2-door, 4-door, etc.) and some of the options that were available for that specific model of vehicle. The customer makes the appropriate selection and enters the vehicle's mileage. Based on definitions provided, the customer is then asked if the vehicle's condition is "excellent," "good," or "fair." Based on this information, the web site provides an estimated trade-in value and, if requested, an estimated retail value for that particular vehicle. A report may also be printed for the customer's records.

NADA

The NADA web site permits customers to estimate the retail values of many different types of vehicles, including automobiles. To appraise his or her used automobile, the site visitor selects the make, model and year of his or her automobile. Based on this information and a preset mileage range setting forth what is deemed acceptable for that vehicle, a low, average, and high retail value is calculated and presented to the customer. No trade-in value is calculated. Instead, the customer is advised that trade-in values are typically lower than the retail values.

EDMUNDS

The Edmunds web site permits the customer to estimate the retail and trade-in values of his or her vehicle. At the Edmunds web site, the customer selects the make, model and year of the vehicle and base trade-in and retail values are presented along with a short summary of the car and its standard options. The customer then selects the options on the vehicle and the base values are adjusted accordingly. The customer also indicates the mileage, and the base price is

adjusted up or down depending upon whether the actual mileage is below or above a designated mileage range. A summary sheet is then presented with the inputted information and the estimated trade-in and retail values of the vehicle.

In the near future, the major automobile manufacturers will sell vehicles directly to their customers over the Internet and give their customers the ability to select options for their next automobile, calculate payments, get financing approval, and request that their cars be delivered directly to them by the closest dealer or that they be directed to the automobile dealer closest to them with their selected car in stock. In any case, it is desirable that the terms of the financial transaction be completed with the manufacturer prior to the customer setting foot into the dealership for a test drive so that control over the vehicle purchase may remain with the manufacturer rather than the dealer. Unfortunately, existing appraisal web sites merely provide ballpark estimates to guide the customer in his or her new vehicle search and do not establish the trade-in value with enough specificity that the vehicle trade-in value may be made part of the on-line purchase transaction. Also, the information provided by such web sites tends be incomplete and thus misleading to the consumer. The present invention is intended to overcome these limitations of the art so as to facilitate on-line vehicle purchases under control of the vehicle manufacturer.

SUMMARY OF THE INVENTION

The present invention addresses the above-mentioned needs in the art by providing a web site and an associated business method that enables on-line appraisal of a particular vehicle and assigns an actual cash value to that particular vehicle so that the actual trade-in value may be included as part of the on-line purchase of another new or used vehicle. In this manner, the present invention permits on-line vehicle retailers to take into account the value of used vehicle trade-ins so that the entire vehicle purchasing transaction may be completed on-line from the comfort of the purchaser's home without high pressure sales tactics. In particular, the present invention prompts the customer to input all of the information that is needed to make a complete appraisal and provides a value that is accurate for the customer's vehicle. Once the appraisal is complete, a comprehensive summary page or "certificate" is printed that is submitted as part of the on-line purchase transaction. Then, when the new vehicle is delivered, the summary sheet is compared to the actual vehicle provided for trade-in and any final adjustments based on objective criteria are made as appropriate.

Thus, in accordance with the invention, the customer is provided with a specific value for his or her actual vehicle, not just a general value for vehicles of the same make, model, year, trim, etc. Because of the completeness, accuracy, and standardization of the on-line appraisal

provided by the present invention, the appraisal value may be accepted by the new car dealer as cash. The summary sheet is designed in such a way that the consumer can and will take it with him or her to the dealer so that the dealer can walk around the car and assess the information included in the summary. If any data has been entered improperly, the new data may be inserted and a new value calculated on the spot. Haggling between the dealer and customer would be removed since the program values would be provided by an independent third party who is best suited to determine the actual vehicle value.

In particular, the present invention relates to an on-line vehicle appraisal system for appraising a value of a vehicle. In a preferred embodiment, the system includes a web server connected to a data network accessible by a customer, a database containing vehicle data for a plurality of vehicles and that is accessible by the customer via the web server, a web page memory that stores web pages for presentation to the customer by the web server in a predetermined sequence, and a processor that calculates the value of the vehicle. The presented web pages elicit information from the customer including at least the condition of a plurality of features of the vehicle, and this vehicle condition information as well as data stored in the database is used by the processor to calculate the value of the vehicle. The processor uses an objective vehicle valuation algorithm that, among other things, accounts for the differential effects of multiple flaws in the vehicle. Preferably, the web server further presents a printable certificate to the customer listing the calculated value of the vehicle and the vehicle data and vehicle condition information for the vehicle, where the vehicle data includes a vehicle identification number (VIN) for each vehicle and a listing of the year, make, model, and manufacturer options for each vehicle. The web server may also assign a session number to each vehicle appraisal session by a customer whereby the customer may recall a complete or partially completed vehicle appraisal session at a later time using the session number. The web server may further present a printable appraisal sheet to the customer that is printed by the customer and used to collect the vehicle condition information for entry by the customer during a vehicle appraisal session.

In a preferred embodiment, the vehicle data includes a core value and core adjustment values for each feature condition that are unique to each vehicle in the database. The vehicle valuation algorithm uses the core value and the core adjustment values as default values unless the vehicle condition information is changed by the customer during the on-line appraisal session. If the vehicle condition information is changed by the customer, the vehicle valuation algorithm adjusts the core value for the vehicle by the core adjustment values for the vehicle in accordance with the vehicle condition information provided by the customer. In the case where the vehicle is an automobile, the vehicle condition information may include the condition of at

least one of the following features of the vehicle: mileage, bumpers, exterior body, windshields, tires, seats, door panels, dashboard, and frame. In such an embodiment, the condition of the exterior body of the vehicle is specified by the customer by identifying a number of dents, dings, and scratches in respective panels of the exterior body of the vehicle. This process is facilitated by the invention by providing web pages including flaw screens for each feature of the vehicle and a navigation graphic that enables the customer to select a flaw screen for each vehicle feature.

The present invention may also be used in an on-line vehicle purchasing system such that the value of a vehicle trade-in is used as part of the consideration in the on-line vehicle purchase transaction. In such a case, a link may be provided from the web server of the web site where the vehicle purchase transaction is being generated and the appraisal web site of the invention.

The scope of the invention also includes business methods for providing vehicle appraisal services and a method of selling vehicles on-line taking into account the appraised value of a trade-in vehicle. In particular, the method of providing vehicle appraisal services for appraising . a value of a vehicle in accordance with the invention comprises the steps of:

providing a node on a data network accessible by potential customers, the node including a database containing vehicle data for a plurality of vehicles, the database being accessible by a customer via a customer interface to the data network;

· presenting pages of data to the customer interface for eliciting information from the customer including at least the condition of a plurality of features of a vehicle to be appraised;

calculating the value of the vehicle from value data stored in the database for the vehicle and from condition information provided by the customer in response to the presented pages using an objective vehicle valuation algorithm; and

presenting the value to the customer as an actual appraised value of the vehicle.

The on-line appraisal method of the invention may also include the step of providing a customer with a printable vehicle appraisal sheet identifying types of damage and wear that the vehicle may endure. Preferably, the vehicle appraisal sheet further elicits vehicle condition information including at least the condition of the plurality of features of the vehicle that is later input by the customer during the on-line appraisal session.

The scope of the invention further includes a method of selling vehicles on-line comprising the steps of:

creating over a data network an on-line vehicle purchase transaction for the purchase of a designated vehicle from an on-line vehicle merchant, whereby part of the financial consideration for the purchase of the designated vehicle is a value of a trade-in vehicle;

appraising a value of the trade-in vehicle by performing the steps of:

accessing a node connected to the data network, the node presenting web pages to the customer eliciting information from the customer including at least the condition of a plurality of features of the trade-in vehicle,

calculating the value of the trade-in vehicle from value data stored in a database containing vehicle data for a plurality of vehicles, including the trade-in vehicle, and from vehicle condition information provided by the customer in response to the presented pages using an objective vehicle valuation algorithm, and

presenting the value to the customer as an actual appraised value of the vehicle; and

including the appraised value of the trade-in vehicle as the part of the financial consideration for the purchase of the designated vehicle.

In accordance with another aspect of the invention, a method of managing inventory of leased or rented vehicles is provided, comprising the steps of:

appraising a cash value of each vehicle available for rent or lease using an on-line vehicle appraisal system that accepts condition information about each vehicle available for rent or lease and receiving from the on-line vehicle appraisal system a first condition report including at least the condition information and cash value of each vehicle;

appraising a cash value of each vehicle returned from rent or lease using the on-line vehicle appraisal system and receiving from the on-line vehicle appraisal system a second condition report including at least the condition information and cash value of each returned vehicle; and

maintaining a database of the first and second condition reports for each vehicle in inventory.

Such a method in accordance with the invention may include the additional step of charging the rentee/lessee of each vehicle returned from rent or lease for the differential between (a) the difference between the first and second condition reports and (b) the rent/lease value paid. Such a method in accordance with the invention also may include the additional step of posting the second condition report on a web site with a representation of the vehicle for sale or auction.

The method of the invention also includes a method of selling a used vehicle on-line comprising the steps of:

appraising a cash value of a vehicle to be sold on-line using an on-line vehicle appraisal system that accepts condition information about the vehicle and receiving from the on-line vehicle appraisal system a condition report including at least the condition information and cash value of the vehicle;

and

posting the condition report on a web site with at least one picture of the vehicle.

BRIEF DESCRIPTION OF THE DRAWINGS

The objects and advantages of the invention will become more apparent and more readily appreciated from the following detailed description of presently preferred exemplary embodiments of the invention taken in conjunction with the accompanying drawings of which:

FIGURE 1 is a generalized diagram of the vehicle appraisal web site of the invention.

FIGURE 2 illustrates the web page requesting zip code and mileage information for the vehicle to be appraised.

FIGURE 3 illustrates the web page requesting vehicle year information for the vehicle to be appraised.

FIGURE 4 illustrates the web page requesting vehicle make information for the vehicle to be appraised.

FIGURES 5A-5B illustrate the web page requesting vehicle model information for the make of vehicle to be appraised.

FIGURE 6 illustrates the web page identifying the options available for the make of vehicle to be appraised.

FIGURE 7 illustrates the web page requesting exterior color information for the vehicle to be appraised.

FIGURE 8 illustrates the web page requesting interior color information for the vehicle to be appraised.

FIGURES 9-18 illustrate the web pages requesting information relating to the exterior condition of the vehicle to be appraised.

FIGURES 19-21 illustrate the web page requesting information relating to the interior condition of the vehicle to be appraised.

FIGURE 22 illustrates the web page requesting frame damage information for the vehicle to be appraised.

FIGURES 23A-23B illustrate the web page identifying the calculated actual trade-in value of the appraised vehicle as well as the calculations used to arrive at this value for the example illustrated in FIGURES 2-22.

FIGURE 24 illustrates a certificate of value including a summary of the entered information and the corresponding appraised value of the vehicle .

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FIGURES 25A-25B illustrate a printable form for use by the customer in collecting the data for the vehicle to be appraised.

DETAILED DESCRIPTION OF PRESENTLY PREFERRED EMBODIMENTS

An on-line appraisal system and method with the above-mentioned beneficial features in accordance with a presently preferred exemplary embodiment of the invention will be described below with reference to FIGURES 1-25. It will be appreciated by those of ordinary skill in the art that the description given herein with respect to those figures is for exemplary purposes only and is not intended in any way to limit the scope of the invention. All questions regarding the scope of the invention may be resolved by referring to the appended claims.

The present invention relates to a web site and associated business method that prompts a customer and permits him or her to input information that allows for the calculation of an accurate appraisal value for a vehicle from updated appraisal information provided in a central database. In the following detailed description, the vehicle appraisal web site of the invention will be explained to understand the nature and extent of information gathered from the customer, and the associated processing and business methodology will be explained in conjunction with the use of the appraisal web site of the invention.

APPRAISAL WEB SITE

FIGURE 1 is a generalized diagram of the vehicle appraisal web site of the invention. As illustrated, the present invention is an appraisal web site that is connected via the Internet or another suitable data network to a number of target customers including vehicle consumers, vehicle manufacturers, vehicle dealers, banks, vehicle insurance companies, research and marketing companies, leasing agencies, and others. The appraisal web site includes a web server 10 that serves web pages stored in web page text/graphics memory 20, which may, of course, be part of web server 10. In accordance with the invention, a vehicle database 30 is provided containing comprehensive information about a plurality of vehicles of all makes, models, years, and body styles for which such information is available. As will be explained below, the information in vehicle database 30 may be accessible by vehicle identification number (VIN) or simply by designated vehicle characteristics. Vehicle core values for each year, make, model, and body type and adjustment values for each feature/defect/flaw are stored in vehicle database 30 for access via the Internet by the customer via web server 10. A vehicle value processor 40 calculates the value of the vehicle by adding/subtracting values from the vehicle's core value based on mileage and other unique characteristics of the vehicle elicited from the customer in connection with the vehicle being appraised by the customer. Vehicle value processor 40 preferably includes algorithms that take into account the repair values for multiple flaws and

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defects in accordance with the guidelines given herein and determines the appropriate adjustments to make for such defects/flaws. Finally, the web page text/graphics data stored in memory 20, the data stored in vehicle database 30, and the algorithms stored in vehicle value processor 40 may be adjusted as appropriate or updated to include new data using administrative interface 50. For example, administrative interface 50 may be used to adjust the flaw/defect values for each of the defects described in the defect/flaw categories set forth below.

As noted in Figure 1, potential customers of the appraisal web site of the invention include vehicle consumers, vehicle manufacturers, vehicle dealers, banks, insurance companies, research and marketing companies, leasing agencies, and the like. Each such customer will interact with the web site of the invention in different ways via different nodes or web servers and different revenue models will apply in each case.

Vehicle consumers will be given access to the web site of the invention free of charge. Costs for this service will be covered by advertising revenues. The vehicle consumer will also be able to access the web site of the invention via a direct link on the respective manufacturers' web sites or other vehicle purchasing web sites. The appraisal calculated by the web site of the invention will be used in the on-line financial worksheets of the manufacturers and other on-line vehicle merchants so that the vehicle purchase transaction with the customers may be completed on-line. In a retail center, the vehicle customer may be given access to an Internet enabled computer terminal or Internet appliance for accessing the web site of the invention so that the appraisal process may be concluded at the retail center.

Vehicle manufacturers will be charged for setting up a portal to the web site of the invention so that the manufacturer is provided a graphical interface having a look and feel that is consistent with that of the manufacturer's web site. The manufacturers will be charged a per hit use charge for access to the web site of the invention using conventional tracking methods. In return, the manufacturer will be provided a mechanism whereby its customers may complete the entire financial portion of the vehicle purchase transaction on-line, including the appraised amount for the used vehicle trade-in. Advertising on the web site of the invention will also specifically match the manufacturer's advertising with the types of cars being appraised. Other types of advertising will also be keyed to the type of car being appraised and/or the designated new vehicle under consideration.

Vehicle dealers who do not already have Internet access will be given or will be asked to purchase an Internet enabled computer terminal or web appliance to access the web site of the invention. Generally, the dealer's interface will not present any advertising to the dealer. The dealer will use the web site of the invention for vehicle appraisals to assure standardization of vehicle appraisals and will share this terminal/web appliance with its customers. Access to the

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web site will be available at a subscription price that will allow for unlimited uses or on a per use basis. Franchised dealers may alternatively be given a direct link to the web site of the invention from their dealer web site at no charge. The interface would be the same as that of the corresponding manufacturer, assuming that manufacturer is also a participant. The vehicle dealer will also benefit by providing advertising to the web site of the invention that is targeted to vehicle consumers appraising vehicles of the type sold by the dealer. Since the zip codes are entered into the web site of the invention, the dealer's advertising also would be targeted to those appraisal customers in the dealer's geographic area.

Banks also have a portfolio of off-lease vehicles. The present invention will give such banks a tool to either evaluate their inventory or to offer the inventory for sale to their dealer group(s) at the actual cash values of the vehicles in inventory. The site may also be used to appraise vehicles for purposes of extending loans on the vehicles or as collateral on other loans.

Insurance companies may use the present invention to evaluate crashed vehicles as well as the damage to stolen vehicles. The present invention will provide a neutral objective standard for assessment of such vehicles by insurance adjusters.

Research and marketing companies may use the appraisal web site of the invention to generate lists of what vehicles customers are attempting to trade-in, what manufacturer's web site they linked to or from, and what products they compared during their on-line shopping. Such information may be procured during appraisal sessions and stored for this purpose.

Leasing agencies that may or may not be associated with the vehicle manufacturers may also use the appraisal web site of the invention to manage the leasing agencies' portfolio of off-lease cars. In this context, the dealer or leasing agency receiving the returned vehicle will input a condition report for the returned vehicle, receive an appraisal value, and determine whether or not to purchase the vehicle from the manufacturer or place the vehicle for sale on the dealer's lot, on the dealer's web site, and/or on the manufacturer's or leasing agent's web sites. This process eliminates the requirement of hiring an outside appraisal company to travel to the dealer's or leasing agent's location and to prepare a report. Records of these appraisals permit the manufacturers and leasing agencies to keep track of the value of off-lease inventory.

Thus, the present invention has numerous useful applications for inventory management, lease portfolio management, condition report for vehicles before loans, and lease condition reports for banks and manufacturers. Traditionally, before a vehicle is leased, a condition report must be filled out by the dealer and submitted with the paper work before the dealership is funded for that vehicle. At the end of the lease, when the vehicle is returned by the consumer to the dealer, the dealer once again fills out a condition report and calls the bank to inform it that the vehicle has been returned. In accordance with the present invention, at lease inception the

dealer instead submits the condition report via the Internet by simply entering the vehicle identification number (VIN), the vehicle's mileage, the vehicle's options and colors, and any damage to the vehicle. This on-line form is given a portfolio number and three printable certificates will be issued or e-mailed to the customer specifying the value and condition of the vehicle at lease inception. One certificate will be sent to the customer for his or her records; the dealer will retain one certificate; and one certificate will be sent along with the paper work to the bank for funding. The same steps are followed when the vehicle is returned at the end of the lease. The vehicle's end of lease condition report will facilitate an assessment of vehicle damage during the lease period for proper charging of the customer at the end of the lease.

When the vehicle is returned at the end of its lease period, the dealer will prepare a lease return condition report by entering the VIN number and account number. The dealer would then appraise the vehicle using the appraisal web site of the invention to determine its condition and return value. At the conclusion of the appraisal, four reports will be generated and signed by both the customer and the dealer. One condition report will be given to the customer, one retained by the dealer, one retained by the transporter hired by the bank to transport the vehicle to auction or to another dealer, and one retained by the bank or leasing agent. Of course, this process may be conducted electronically, as appropriate. The condition report thus protects the customer from a claim that something has been removed or that the vehicle has been damaged after the vehicle has left the customer's possession. Comparison to the condition report generated at lease inception will also inform the customer of any possible liability for excess damages. Similarly, the auto dealer will be protected by the fact that the customer will no longer be able to say that certain damages occurred while the vehicle was in the dealer's possession after lease return. The dealer will also be protected from responsibility for transport damage. The transporter will use the form as protection against damage claims for damages that occurred prior to transport.

The present invention thus allows post-lease vehicles to be efficiently checked for damage and the customer charged accordingly. For example, the rentee/lessee of each vehicle returned from rent or lease may be charged for the differential between (a) the difference between the prerent/prelease condition report and postrent/postlease condition report and (b) the rent/lease value paid by the rentee/lessee. Also, the bank or leasing agent may readily post the returned vehicle with its condition report on a web site offering it for sale with a full disclosure of the vehicle's condition. For example, digital pictures of all sides and the interior of returned vehicles may be posted with the condition reports for the respective vehicles to provide a virtual used car lot. This will allow other dealers or individuals to either buy the vehicle via the Internet or to preview the vehicle before it goes to auction. The banks and leasing agents will also be able to

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access the value of their used vehicle portfolio at any time thus allowing them to make quick and timely remarketing decisions.   The present invention will also permit the dealers and leasing agents to approximate the reconditioning cost of a certain vehicle to determine the remarketing costs in preparation for a wholesale auction.

The present invention may also be used by large corporations such as rental car companies to manage their vehicle fleets.

The method of the invention will be very useful to the consumer because he or she will be given a complete list of the vehicle's options and condition at lease inception and when the vehicle is returned. The consumer thus will have a written record of the condition of the vehicle so that when the vehicle is returned the bank or leasing company cannot charge the consumer for something that was already on the vehicle when the consumer received it. The dealer will also benefit the dealer by clarifying what damage the vehicle received during the lease period (between condition reports). The bank or leasing company also benefits in that it will have immediate access to the condition of the vehicle for which it is considering funding. If there is a problem with funding because of lack of options or frame damage, for example, the bank will be able to stop the process before the customer leaves with the vehicle.

When a customer accesses the appraisal web site of the invention, he or she is presented with a series of web pages from web page text/graphics memory 20, each web page asking questions in a predetermined order to elicit the detailed information necessary to appraise the customer's vehicle. In a currently preferred embodiment, the web site includes a series of web pages which are presented to the customer in a predetermined sequence. The following sequence of web pages for eliciting vehicle information from customers will be described in detail below:

·   Flash page

·   Zip code

·   Miles

·   VIN (optional; if chosen will take user to options)

·   Year

·   Make

·   Model

·   Options

·   Exterior color

·   Interior color

·   Exterior condition (diagramed later)

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· Interior condition (diagramed later)

· Frame damage (diagramed later)

· Trade-In Value

Flash page:

The flash page is the page the customer receives upon arrival at the appraisal web site of the invention. It summarizes that the web site elicits year, make, model, mileage, and condition information about the customer's vehicle and returns an actual trade-in value.

Zip code:

As illustrated in FIGURE 2, the customer is first prompted to enter the zip code where the customer's vehicle is to be traded. The zip code will drive the server 10 to pull up from the vehicle database 30 the base values, for any vehicle, in that area of the country. At least four zones will be used as defaults zones as necessary, including the Northeast, Southeast, Central and West coast zones. Since different parts of the country have different selling seasons, this information is also used to set up the parameters in order to take care of these contingencies to account for supply/demand issues and the like.

The zip code provides the proper base value for the vehicle to be appraised since the area in which the vehicle is to be traded directly affects its value. For example, a convertible in December is more valuable in California than it is in New York. The vehicle value processor 40 uses the zip code to add and to deduct from each individual core value a specific amount depending on region and climate.

Mileage:

As also shown in FIGURE 2, the customer is prompted to enter the mileage of the vehicle being appraised. In a preferred embodiment, the vehicle database 30 has five different values set up for use by vehicle value processor 40 to calculate the effect that mileage has on a specific vehicle within each year. These values are set up for a specific vehicle as follows: specialty, high line, light usage, normal usage and a default value. Thus, actual mileage, as opposed to a range of mileage, is used to calculate the vehicle's value. Each value grouping is also set up to first reduce the rate of reduction for mileage and then to stop deducting for mileage after a certain amount of miles has been calculated in relation to the core value for that specific vehicle. In a preferred embodiment, the deduction for mileage is slowed before fifty percent of the vehicle's value is diminished. When adding value to a vehicle for low mileage, a different formula to add back half the value for low miles in the same fashion that a deduction is made for high mileage. For example, once approximately forty percent has been added back to the vehicle's value, no

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additional value is added. Default categories are also provided for specific, normally specialty vehicles that do not conform to any standard mileage calculations.

For example, mileage may be broken down into the 4 mileage categories other than default and each vehicle may have a mileage file associated with it. Such categories may also be overridden by creating a mileage table for each vehicle type. In any case, each vehicle preferably has a mileage field associated with it that is checked by the server 10 in case no specific mileage value is entered. The value adjustment amounts associated with the number of miles, cost per thousand miles, and percentage at which the rate of deduction or addition in value begins to slow down as a relation to the core value of the vehicle may be adjusted by the database manager via administrative interface 50. For example, $100.00 may be deducted for each thousand miles below a standard level until the deduction reaches 30% of a vehicle's core value, at which time the deduction slows to $50.00 per thousand miles until the deduction reaches half the vehicle's core value, at which time the deduction stops. The same is true for adding value for low mileage. For example, $50.00 could be added for every thousand miles below a standard level until the addition reaches 30% of the vehicle's core value, at which time the addition rate would slow to $25.00 per thousand miles until half the vehicle's core value is reached.

Vehicle identification number (optional):

If the vehicle information number (VIN) is available, it is also requested from the customer. The vehicle information number is the serial number for the specific vehicle to be appraised. In a preferred embodiment, a help screen associated with this field may be selected to briefly describe to the customer what a VIN is and where it can be located on the owner's registration, title, or on the vehicle itself. The vehicle database 30 site stores all VIN codes that are used by vehicle manufacturers for the year, make, and model of all cars imported into the United States for retail sale. If the VIN is entered, web server 10 automatically searches the vehicle database 30 and acquires the year, make, and model of the vehicle in question. In most cases, the server 10 also pulls up from vehicle database 30 the transmission used in the vehicle with the inputted VIN as well as the core values associated with that year, make, and model of vehicle. If such information is available, the server 10 will also bypass the user entry fields that are associated with year, make, and model, as described below. This is particularly helpful for those customers who do not know what specific vehicle he or she owns. On the other hand, if the VIN is not entered, the field will carry no weight except to drive the system forward and allow the year, make, and model user entry fields to be accessed by the customer.

Year:

As shown in FIGURE 3, the year of the vehicle is entered next. The year of the vehicle, whether chosen by the entering of the VIN or manually entered, prompts the server 10 to pull up

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from the vehicle database 30 the manufacturers that were producing vehicles for retail sale in the United States that year. The server 10 will now only access vehicles and their values for this specific year of production.

Make:

If the VIN is not entered, the server 10 then lists for selection those makes (manufacturers) of vehicle available in the inputted year. The make (manufacturer) is then designated through manual entry as shown in FIGURE 4. If the VIN is entered, the make is automatically presented to the customer.

Once the make is designated, the server 10 will be allowed to access data only for the models and their associated core values available in the specified year by the specified manufacturer.

Model:

As shown in FIGURES 5A and 5B for a used 1998 Mercedes, the server 10 next presents the available models (including transmission and trim level) for the designed make and year. If the customer has entered the VIN of his or her vehicle, the model is automatically presented from the vehicle database 30. The customer entry portion of this field is then locked out unless the manufacturer has not designated a transmission or trim level within a specific model that was chosen within their VIN code. In this case, the customer will be required to complete this screen and asked to choose his or her specific model including its transmission type and trim level. The VIN typically identifies the transmission used in the vehicle and directs the server 10 to the specific core value for the vehicle. The VIN also directs the customer to the appropriate trim level, which is a subset of all model designations. For example, a person may have a Honda that they know is an Accord but that they do not know to be an EX, LX or DX. The VIN provides this information. On the other hand, if the VIN was not used, the customer will be directed to the web pages of FIGURES 5A and 5B after entry of the year and make. The server 10 will only present to the customer the specific models that were available for sale by the designated manufacturer in the designated year. The customer is also required to select the exact model at this time, including its trim level and transmission.

The model field holds the core value field unto which all calculations described below will be based. Although values will be added or subtracted, a core value of the vehicle generated by a team of experts will reside in this spot. These experts preferably include individuals who are experts in working with retail centers, wholesaling cars, and/or attending vehicle auctions. Residual values are also provided by banks and the manufacturers.

Options:

As shown in FIGURE 6, customers are next taken to the option field designating the specific extras that the manufacturer made available for a particular model of vehicle in a particular year. All OEM (original equipment per manufacturer) options available for the designated vehicle model at time of delivery are pulled from the vehicle database 30 as well as the individual values associated with each option. Such option values will either be added to or subtracted from the aforementioned core value as appropriate. As will be appreciated from the examples in FIGURE 6, these option values are real values for the actual options available for the designated year, make and model of vehicle. The option values are all individually assigned when input into the vehicle database 30. No option values are grouped across makes and models.

In a preferred embodiment, values are not listed to the customer for each option. Indeed, some options do not carry a value for a pre-owned vehicle, even if they happened to be offered by the manufacturer when the vehicle was new. Instead, the listing of options will be presented to the customer as they were presented at the time of purchase of the vehicle. Thus, in most cases, the packages and nomenclature similar to that of the vehicle manufacturers will be used.

Exterior Color

As shown in FIGURE 7, the exterior color of the vehicle is also requested since the color of the vehicle also affects the value of the vehicle. All of the exterior colors for the designated year, make and model are retrieved from the vehicle database 30 and shown to the customer in a palette for selection by the customer. The colors will also have the names associated with them by the manufacturer to help with the identification process. As appropriate, the core value of the vehicle is adjusted in accordance with the lesser or greater value attributed to the exterior color of the vehicle. In this manner, the extra value attributed to "hot" vehicle colors is accounted for.

Interior Color

As shown in FIGURE 8, the interior color available with the selected exterior color for the designated year, make and model of vehicle is also elicited from the customer. All of the interior colors that were available to the public when the manufacturer offered the car being appraised for sale new are presented for selection. These colors are also shown to the customer in a palette very similar to that of their vehicle's upholstery for ease of identification. The names of the colors also will be in the manufacturer's nomenclature. As with exterior colors, all interior color values are assigned in the vehicle database 30 on an individual basis. Some interior colors will have no effect at all while others will add or subtract to the vehicle's core value.

Exterior Condition:

The present invention significantly departs from prior art on-line vehicle appraisal systems in its ability to provide a detailed assessment of the vehicle's exterior condition. As will be apparent from FIGURES 9-18, this process is simplified through the use of a graphic illustration of the customer's vehicle.

At present, there are eight different vehicle types that the appraisal system accounts for. The vehicle type is determined by the designated model, either through the VIN or manual entry of model type. All of the eight types will have a specific drawing of that type of vehicle which is used to enable the customer to visually look at his or her type of vehicle as he or she is asked to describe its condition.

Such vehicle types include:

- Two door coupe
- Four dour sedan
- Two door convertible
- Station wagon
- Two door sport utility
- Four door sport utility
- Van
- Pick up truck

As shown in each of FIGURES 9-18, a navigation bar, a line that connects the panels of the vehicle together, surrounds the rendering of the vehicle that is being appraised to enable the customer to go from panel to panel on the vehicle in question. The panels will come up in a progressive order on separate pages as illustrated in each of FIGURES 9-18.   Such panels include:

- Bumpers (FIGURES 9 and 16)
  a) Front bumper
  b) Rear bumper
- Hood (FIGURE 10)
- Roof (FIGURE 11)
- Fenders (FIGURE 12)
  a) Drivers side fender
  b) Passengers side fender
- Doors (FIGURE 13)
  a) Drivers side front door
  b) Passengers side front door
  c) Driver side rear door (if needed)

   d) Passenger side rear door (if needed)

· Quarter panels (FIGURE 14)

   a) Driver side quarter panel

   b) Passenger side quarter panel

· Deck lid (tail gate in trucks) (FIGURE 15)

· Glass (FIGURE 17)

   a) Windshield

   b) Rear glass

· Wheels (FIGURE 18)

   a) Drivers side front wheel

   b) Drivers side rear wheel

   c) Passenger side front wheel

   d) Passengers side rear wheel

· Tires (FIGURE 18)

   a) Drivers side front tire

   b) Drivers side rear tire

   c) Passengers side front tire

   d) Passengers side rear tire

Of course, other characteristics may be evaluated depending upon the characteristics of the vehicle type. For example, pick-up trucks may have separate inputs for truck bed linings and the like.

At each panel, the customer is asked to answer, with the help of "flaw" screens, questions about the portion of the vehicle being investigated. Each screen will have a potential flaw associated with it that carries a value that subtracts a dollar amount from the core value of the vehicle. Each flaw will also carry with it a help screen that will define and show to the user, via a picture, what the flaw is or looks like.

For example, in the case of bumpers (FIGURES 9 and 16), three flaw screens are provided as follows.

· Bumper

   · Condition of bumper

      o No damage (default)

          If there is no damage to the bumper, a default value of no damage is assigned to this field. Choosing this condition will not affect the vehicle's core value.

      o Tear

A tear to the bumper is a fixable item normally a bumper repairperson or a body shop can repair for, *e.g.*, $150. If this field is chosen, there will be a deduction of the repair amount (*e.g.*, $150) from the vehicle's core value.

o Scratched

A scratch on the vehicles bumper is also a repairable item. Most dealerships have available to them a bumper repair service or a body shop. In either case, the bumper can be repaired for a fee of, *e.g.*, $150. If this field is chosen, the vehicle's core value will be assessed the appropriate dollar amount. However, if the tear section also has been chosen, the repainting will already have to be done. In this case, the vehicle's value will only be assessed a lesser amount (*e.g.*, $50) for the actual repair.

o Severe damage

Severe damage to a bumper will require the bumper to be replaced. An individual value will be assigned to this category based on the replacement value of the bumper.

· Repainted

o Not repainted (default)

Choosing this field will not affect the vehicle's core value.

o Repainted

A repainted bumper will carry a zero or some other assigned value.

· Replaced

o Not replaced

Choosing this field will not affect the vehicle's core value.

o Replaced

A replaced bumper will carry a zero or some other assigned value.

In a preferred embodiment, five flaw screens are provided for the painted or body sections of the vehicle since they all have the same flaws associated with them:

· Hood (FIGURE 10)

· Roof (FIGURE 11)

· Fenders (FIGURE 12)

a) Drivers side fender

b) Passengers side fender

· Doors (FIGURE 13)

a) Drivers side front door

b) Passengers side front door

c) Driver side rear door (if needed)

d) Passenger side rear door (if needed)

· Quarter panels (FIGURE 14)

a) Driver side quarter panel

b) Passenger side quarter panel

· Deck lid (FIGURE 15)

The five fields for flaws include the following. The first three of these (dents, dings and scratches) are loosely linked together and will only allow a certain amount of deduction to be taken from the vehicle's core value for a given vehicle panel.

· Dents

A dent is a depression in the metal that is greater than the size of an eraser in the head of a pencil. The paint is generally broken and cannot be fixed without painting of the panel in question.

o No dents (default)

Choosing this field will not affect the vehicle's core value.

o 1 dent

Choosing this field will signal to the vehicle value processor 40 that a panel must be painted and a deduction will be made of the appropriate amount (e.g., $250). If the paint chosen is of a metallic color, then a greater value (e.g., $300) will be deducted.

o 2 dents

Choosing this field will signal to the vehicle value processor 40 that an extra deduction must be made. Second and any additional dents affect the vehicle's value on a sliding scale since much of the repair work need not be repeated for extra dents.

o 3 dents or more

In a preferred embodiment, choosing this field will have the same effect as if there were just two dents.

· Dings

A ding is a depression in the metal that is equal to or less than the size of an eraser on the head of a pencil. The paint cannot be broken. Generally speaking, a jobber can fix these depressions at a cost of, e.g., $75 dollars a panel.

o No dings (default)

Choosing this field will not affect the vehicle's core value.

o 1 ding

Choosing this field will signal the vehicle value processor 40 that a deduction from the vehicle's core value should be made for the repair cost for the ding.

o   2 dings

Choosing this field will signal the vehicle value processor 40 to deduct from the vehicle's core value the same amount as for one ding since a paintless dent remover charges by the panel, not by the amount of dings.

o   3 dings

Choosing this field will signal the vehicle value processor 40 to deduct from the vehicle's core value the same amount as for one ding.

o   4 dings or more

Having four or more dings in a single panel normally means that the panel with the dings will need to be refinished. This will signal the vehicle value processor 40 to deduct a larger amount (e.g., $250) from the vehicle's core value. If the paint is a metallic color, then the deduction will be larger.

·   Scratches

A scratch is defined as a line in the paint that has either not broken the paint or, if it has, it is not longer than the short side of a credit card. In either case, a detail person or a jobber in most cases can remove the scratch. Deep scratches are scratches that have broken the paint and are longer than the short side of a credit card. This type of scratch requires refinishing of the panel.

o   No scratches (default)

·   Choosing this field will not affect the vehicle's core value.

o   1 scratch

One scratch, as defined above, in a panel may be repaired for a set fee of, e.g., $65 that is deducted from the vehicle's core value.

o   2 scratches

Two scratches, as defined above, in a panel may also be repaired at a cost which is greater than that for a single scratch but not necessarily double the cost of repairing a single scratch.

o   3 or more scratches

Three or more scratches, as defined above, in a single panel are not normally fixable, and the cost will include repainting of the panel. Choosing this field will signal the vehicle value processor 40 to deduct from the vehicle's core value the corresponding value for repainting the vehicle's panel.

o   Deep scratches

Deep scratches, as defined above, also are not fixable. In order to repair deep scratches, the panel will need to be refinished. When this field is chosen, the vehicle value

processor 40 will deduct from the vehicle's core value the amount to refinish the panel.

· Repainted

A repainted panel is a panel that has been refinished since the vehicle left the factory.

o Not repainted (default)

Choosing this field will not affect the vehicle's core value.

o Repainted well

Vehicles that have a repainted panel that is well done do not loose value. Thus, when this field is chosen, the vehicle value processor 40 will not adversely affect the vehicle's core value.

o Repainted poorly

Vehicles that have a poorly repainted panel will have to be repainted before resale. An appropriate amount for paint stripping, body work, and repainting the panel is deducted from the vehicle's core value.

All of the above calculations are for one panel of the vehicle. These calculations are repeated for all of the vehicle's panels. In a preferred embodiment, these values are interrelated to institute a cap on the amount of damage that one panel can receive. In other words, if a car has five dings, three scratches, and a dent, the panel will need to be repainted at the repainting cost. The vehicle value processor 40 will stop calculating after it reaches such numbers and will deduct the repainting cost from the vehicle's core value and also to make any necessary adjustments to the vehicle's core value to reflect that the vehicle has been repainted. In a preferred embodiment, when the customer selects any of the following fields, the vehicle value processor 40 assumes that the panel is or is going to be repainted. For this reason, the vehicle value processor 40 will assign a value of "repainted" to these panels:

o Dents (any field under this section)

o 4 dings or more

o 3 or more scratches

o Deep scratches

o Repainted well

o Repainted poorly

When a vehicle has two or more panels that are painted, the value of that vehicle will be affected.

· Replaced

A "replaced" panel will affect the vehicle's value as follows:

o Not replaced (default)

Choosing this field will not affect the vehicle's core value.

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o   Replaced

When a vehicle has a replaced panel, the vehicle value processor 40 will make a deduction from the vehicle's core value.

The vehicle value processor 40 will assign a dollar value to these categories. The amount will change with the year of the vehicle. The default value will be for very specific cars that do not adhere to the rules put in place for any of the categories. The vehicle value processor 40 will recognize if "replaced" is checked so that only the "replaced" deduction will be allowed to affect the vehicle's core value and not the "repainted" deduction as well.

Both the windshield and the rear glass (FIGURE 17) have flaws that are unique to these components. The flaws for the windshield and rear glass include:

·   No damage (default)

Choosing this field will not affect the vehicle's core value.

·   1 star

A star is a little chip in the windshield that a stone would make in the windshield. A star can usually be repaired by a jobber at a repair cost of, *e.g.*, $50. When this field is chosen by the customer, the vehicle value processor 40 will perform a deduction of this amount to the vehicle's core value.

·   2 stars

The cost to repair the second star is about half the price from a jobber. The vehicle value processor 40 will, when the customer selects this field, perform a deduction of, *e.g.*, $75 from the vehicle's core value.

·   3 or more stars

The cost to repair this many stars and the quality of the repair makes it cost efficient to replace the glass, the replacement cost of which is deducted from the vehicle's core value.

·   Cracked

A crack in the windshield is an elongated splinter in the glass. A crack makes it necessary to replace the glass, the replacement cost of which is deducted from the vehicle's core value.

·   Fogged

Fogging of a windshield is rare but if this happens within the wiper travel the windshield would need to be replaced in order to pass any safety inspection. When the customer chooses this field, the replacement cost of the glass is deducted from the vehicle's core value.

The vehicle value processor 40 will recognize the relationships of these values and will only allow a total of the replacement cost of the glass to be deducted. This deduction, the amount to replace the windshield, will be the most allowed no matter how many of the items are chosen.

The wheels section (FIGURE 18) has flaw screens for each wheel and for each tire. The flaw screen for the wheels includes:

·   No damage (default)

Choosing this field will not affect the vehicle's core value.

·   Scratched

A scratched wheel is a wheel that has a long mark in it that has damaged the painted surface of the wheel. A jobber can repair this. The vehicle value processor 40 will deduct a dollar amount for the repair from the vehicle's core value when this field is selected.

·   Bent or scraped

A bent wheel is deformed so that it is no longer round. A scraped wheel is when the lip of the wheel has been brushed up against a curb. Both of these problems can be fixed by a jobber for a flat fee of, *e.g.*, $150. The vehicle value processor 40 will deduct this amount every time the customer selects this field.

The vehicle value processor 40 will recognize the relationships among all damage done to a wheel and will limit the deductions from the vehicle's core value to the replacement cost.

The flaw screen for the tires includes:

·   More than 75% tread (default)

Choosing this field will not affect the vehicle's core value.

·   50% to 75%

Tires that have fifty percent or more of their tread are acceptable to the majority of retailers and will not be replaced before being resold. No deduction from the vehicle's core value will be made when this field is selected.

·   25% to 50%

Tires that are in this category will need to be replaced by the retailer before reselling the vehicle. The vehicle value processor 40 will recognize this and make an appropriate deduction from the vehicle's core value.

·   25% or less

Tires that are in this category will need to be replaced by the retailer before reselling the vehicle. The vehicle value processor will recognize this and make an appropriate deduction from the vehicle's core value.

The proper amount to be deducted for each tire to be replaced will depend on which of the afore-mentioned categories the tire is placed: specialty, highline, light usage, normal usage, and

default. A dollar value is assigned to each of these categories, and general deductions will be made based on these categories. The default value field will be for very specific cars that do not adhere to the rules for any of these categories.

Interior Condition

The condition of the interior of the vehicle is appraised to provide deductions for tears, burns and stains based on the real cost to repair. These values are deducted from the core value for each flaw. The vehicle's interior is divided into the following basic parts:

- Dash
- Seats
    - o Driver seat
    - o Passengers seat
    - o Rear seat
- Door panels
    - o Drivers side front door panel
    - o Drivers side rear door panel (if needed)
    - o Passengers side front door panel
    - o Passengers side rear door panel (if needed)
- Carpet
    - o Front carpet
    - o Rear carpet

As shown in FIGURES 19-21, at each panel, the customer is asked questions about the condition of the vehicle's interior using flaw screens. Each one of the flaw screens has a potential flaw associated with it that carries a dollar value to be subtracted from the core value. Each flaw screen also will carry with it a help screen that will define and show to the user, via a picture, what the flaw is or looks like. The flaws on all of the interior sections will be as follows:

- Rips

    A rip in the interior is defined as a flaw in the interior smaller than the size of the small edge of a match pack. A jobber can repair these flaws, but the cost must be charged to the vehicle's core value.

    - o No rips (default)

        Choosing this field will not affect the vehicle's core value.

    - o 1 rip

        When a customer chooses this field, a deduction for the cost of the repair (*e.g.*, $30) will be deducted from the core value of the vehicle.

o   2 rips

When a customer chooses this field, a deduction for the cost of the repairs (*e.g.*, $50) will be deducted from the core value of the vehicle.

o   3 or more rips

When a customer chooses this field, a deduction for the cost of the repairs (*e.g.*, $100) will be deducted from the core value of the vehicle.

· Tears

A tear in an interior is a hole that is longer than the edge of a match pack. This type of repair is generally not fixable at the dealership. This type of repair must be sent out to be repaired at an interior shop.

o   No tears

Choosing this field will not affect the vehicle's core value.

o   1 tear

When a customer chooses this field, the vehicle value processor 40 will deduct from the vehicle's core value a specific dollar amount (*e.g.*, $100) assigned to be the repair cost normally associated with replacing a single panel of fabric or leather.

o   2 tears

When a customer chooses this field, the vehicle value processor 40 will deduct from the vehicle's core value a specific dollar amount (*e.g.*, $200) assigned to be the repair cost normally associated with replacing a single panel of fabric or leather.

o   3 or more tears

When a customer chooses this field, the vehicle value processor 40 will deduct from the vehicle's core value a specific dollar amount for the cost of replacing the entire panel (e.g., $250).

· Burns

A burn in the interior is defined as a flaw in the interior caused by heat, normally a cigarette or matches. This defect is to be equal to or smaller than the size of the eraser on a pencil. A jobber can repair these flaws, and the repair cost is subtracted from the vehicle's core value.

o   No burns (default)

Choosing this field will not affect the vehicle's core value.

o   1 burn

When a customer chooses field, a deduction of the repair cost (*e.g.*, $30) will be deducted from the core value of the vehicle.

o   2 burns

When a customer chooses field, a deduction of the repair cost (*e.g.*, $50) will be deducted from the core value of the vehicle.

o   3 or more burns

When a customer chooses field, a deduction of the repair cost (*e.g.*, $100) will be deducted from the core value of the vehicle.

- Stains

A stain is defined as a mark into the fabric or leather. Dyeing the fabric can normally repair this. A jobber can perform this work as well.

o   No stains (default)

Choosing this field will not affect the vehicle's core value.

o   1 stain

When a customer chooses this field, a deduction is made to the core value of the vehicle for the cost of the repair. The entire panel will have to be re-dyed so this value will stay consistent throughout.

o   2 stains

When a customer chooses this field, a deduction is made to the core value of the vehicle for the cost of the repair. The entire panel will have to be re-dyed so this value will stay consistent throughout.

o   3 or more stains

When a customer chooses this field, the vehicle value processor 40 will assume that the entire piece in question needs to be replaced, and the vehicle's core value will be charged the cost of replacement.

Frame Damage

"Frame damage" is a measure of the damage that a vehicle has received due to an accident, and the assigned value is deducted from the core value for the vehicle. In a currently preferred embodiment, the vehicle database 30 has five different values set up to calculate the effect that frame damage has on a specific vehicle for a given model year. These values are set up as the following: specialty, high line, light usage, normal usage and a default value for a specific vehicle. The flaw screen (FIGURE 22) will include:

- Frame damage

o   No frame damage (default)

Choosing this field will not affect the vehicle's core value.

· Minor frame damage repaired

    Minor frame damage is defined as a light hit. This field will include core support repairs, replaced bumper supports, and sub-frame damage. When a user chooses this field, the vehicle value processor 40 will deduct a percentage of the vehicle's core value, depending on the category of vehicle, from the vehicle's core value.

o Moderate frame damage repaired

    Moderate frame damage is defined as a minor hit. The damage that will be taken into consideration here will be replaced quarter panels, replaced core supports, and any frame repair that required the straightening of the frame on a frame machine. When a customer chooses this field, the database will deduct a larger percentage of the vehicle's core value based on the class of vehicle.

o Major frame damage repaired

    Major frame damage is defined as a major hit. The damage that will be taken into consideration here will be any repair that required welding or replacement of frame sections. When a customer chooses this field, the database will deduct an even lager percentage of the vehicle's core value based on the class of vehicle.

o Frame damage not repaired

    If the customer chooses this field, the database will deduct a percentage of, *e.g.*, fifty percent of the vehicle's core value. This deduction will cross over all lines of vehicles.

    As with mileage, it is preferred that the damage codes or faults be broken into 4 categories, where each vehicle falls into one of these categories. However, if a vehicle has an extremely high cost for a repair or replacement, it will receive its own value. For example, if the user specifies that the windshield is cracked, the vehicle value processor 40 first looks in that specific vehicle's windshield damage section to determine if there is a value to deduct for the damage. If there is no value stored, then the vehicle value processor 40 checks the appropriate damage section for that specific model and uses the damage value stored there.

    · In a preferred embodiment of the appraisal system of the invention, the appraisal system has a default that assumes that the vehicle being appraised (1) is in good mechanical order (*i.e.*, the engine, drive train, muffler, brakes, *etc.* have only normal wear and tear), (2) does not have any rust, (3) is not customized to include any new or after market accessories, and (4) has never had an odometer problem. Preferably, these fields will be presented to the customer in a "yes/no" format. If a value other than the default value is entered for one of these fields, the appraisal system will still provide an appraisal value with a written disclaimer that the appraisal

value would have been the value of the vehicle if the vehicle did not have one or more of these defects. The actual adjustment to the value would have to be made in a conventional manner.

Also, each vehicle has default values that are unique to each year, make, and model of vehicle that is used in the vehicle value calculation by vehicle value processor 40. Hence, the adjustments made on account of vehicle damage are made in the context of that specific vehicle type as opposed to vehicles in general. For example, a dented hood would have a higher proportionate impact on the value of a late model Porsche than it would on a 10 year old Chevette.

Vehicle Cash Value

Once all of the requested data regarding the condition of the vehicle has been entered in response to the screens illustrated in FIGURES 2-22, the actual cash trade-in value of the vehicle is calculated by vehicle value processor 40 and displayed to the customer as shown in FIGURES 23A and 23B. Of course, these calculations are not available to the customer but are available only through the administrative interface 50 (FIGURE 1) and illustrated here merely to show how the entered data affects the vehicle's cash trade-in value in the example of FIGURES 2-22. In FIGURES 23A and 23B, the cash trade-in value page allows the customer to select a printable certificate that may be printed at the customer's printer and/or e-mailed to the customer for later use. As illustrated, the printable certificate is a complete summary of the condition of the vehicle as input by the customer. A sample printable certificate including a summary of the input information for a 1998 Mercedes E430 is illustrated in FIGURE 24. As illustrated in FIGURE 24, the summary information includes the VIN (if used), year, make, model, exterior color, interior color, OEM options, exterior flaws, tire condition, wheel condition, interior flaws, frame damage report, and value.

In accordance with the business method of the invention, the information provided on the Printable Certificate is verifiably accurate for the vehicle in question so that the cash trade-in value calculated for the vehicle in question may be used by the on-line vehicle dealer as cash. Thus, the printable certificate is submitted by the customer to the on-line vehicle dealer as part of the new or used vehicle transaction. The printable certificate may be obtained via e-mail before the on-line vehicle purchase transaction and e-mailed to the on-line vehicle dealer as part of the on-line vehicle transaction or, conversely, the on-line vehicle dealer may have a hyperlink to the web site of the invention so that the appraisal may be performed at the time of the on-line vehicle transaction and included in the on-line vehicle transaction. Before or upon completion of the on-line transaction, the customer will take the Printable Certificate to an authorized local dealer so that the dealer may walk around the vehicle and assess the information as entered by the customer. Any adjustments to the entered data are made and, as necessary, a new cash trade-

in value is calculated before the vehicle is turned over to the dealer to complete the transaction. Contingencies are preferably included in the on-line contract to account for significant discrepancies.

Of course, the same information used to calculate the vehicle's cash trade-in value may be collected manually by the customer. For this purpose, a printable form such as that illustrated in FIGURES 25A-25B may be printed out from the web-site and used to collect the data concerning the vehicle's condition. The collected data may then be entered by the customer using the web-site or may be taken to the dealer for calculation of the cash trade-in value via the dealer's web connection to the appraisal site of the invention. Of course, in the latter case, the customer would not have the benefit of knowing his or her vehicle's trade-in value until he or she was at the dealer's lot. However, the customer would still benefit from the certainty attached to the trade-in cash value and the lack of haggling over a trade-in value. As described herein, the resulting cash trade-in value calculated using the appraisal system of the invention could be used as currency with participating dealers for an appropriate period of time during which the vehicle's condition does not materially change. The certificate of value could also be used by individuals selling their vehicles to other individuals as the basis for the sales price between these individuals.

As also illustrated in FIGURE 25A, the definitions of the flaws are also provided to the customer on the printable form. Preferably, these definitions are also cross-referenced through a help feature on the web pages whereby the illustrated category of flaw is described and/or a picture of the flaw provided to the customer. For example, if one is evaluating dings but is not sure what constitutes a ding, a help icon for a ding may be selected to bring up a picture of a ding and an exact definition of a ding as implemented in the valuation.

Thus, while existing on-line vehicle appraisal systems collect the basic information such as vehicle year, make, model (series and body style) and give an appraisal estimate, none of the prior art systems provides an estimate that is reliable enough to use as currency in a vehicle purchase transaction. The comprehensive database of the present invention includes the VIN used by manufacturers to track vehicles as well as comprehensive condition information, thereby permitting values to be calculated that are reliable enough to use in vehicle purchase transactions and in maintaining used vehicle inventories.

The present invention may also permit a customer to store an appraisal session by simply typing in the customer's e-mail address. A session number will then be e-mailed to the customer to allow the customer the ability to walk away to gather information and to revisit the web site without having to enter all of the information all over again. The user will also be able to take his or her session number to the retailer of his or her choice and use it there if there is any thing

to be added or subtracted by the retailer to adjust the cash trade-in value of the vehicle. Navigation features in the web site permit any differences found by the retailer to be easily corrected by going back to the saved session and only reentering the new data before recalculating the cash trade-in value. In a case where the customer did not have a saved session, or if it is the first time that the vehicle is being appraised by the dealer, because all values are set to default values, the dealer would only have to enter the zip code, miles, exterior color, and interior color, go directly to the sections that have flaws via the navigation bar, and then go right to the value summary screen.

Although an exemplary embodiment of the invention has been described in detail above, those skilled in the art will readily appreciate that many additional modifications are possible in the exemplary embodiment without materially departing from the novel teachings and advantages of the invention. For example, those skilled in the art will appreciate that other features of vehicles may also be evaluated using the techniques of the invention. Also, those skilled in the art will appreciate that other vehicles, such as motorcycles, boats, aircraft, and the like may be similarly evaluated and cash trade-in values determined on-line using the techniques of the invention. Further, those skilled in the art will appreciate that the appraisal information may be entered into a handheld data entry device or other portable web access device and uploaded to the appraisal web site of the invention through a wireless Internet connection or through a "sync" operation with a personal computer connected to the Internet. Accordingly, these and all such modifications are intended to be included within the scope of this invention as defined in the following claims.

What is claimed is:

1.   An on-line vehicle appraisal system for appraising a value of a vehicle, comprising:

a web server connected to a data network accessible by a customer;

a database containing vehicle data for a plurality of vehicles, including said vehicle, said database being accessible by the customer via said web server;

a web page memory that stores web pages for presentation to the customer by said web server in a predetermined sequence, said presented web pages eliciting information from the customer including at least the condition of a plurality of features of said vehicle; and

a processor that calculates the value of said vehicle by processing vehicle data stored in said database for said vehicle and the vehicle condition information provided by the customer in response to the presented web pages using an objective vehicle valuation algorithm.

2.   A system as in claim 1, wherein said web server further presents a printable certificate to the customer listing the calculated value of said vehicle and the vehicle data and vehicle condition information for said vehicle.

3.   A system as in claim 1, wherein said vehicle data includes a vehicle identification number (VIN) for each vehicle and a listing of the year, make, model, and manufacturer options for each vehicle.

4.   A system as in claim 1, wherein said vehicle data includes a core value and core adjustment values for each feature condition that are unique to each vehicle in said database, and wherein said vehicle valuation algorithm uses said core value and said core adjustment values as default values.

5.   A system as in claim 4, wherein said vehicle valuation algorithm adjusts said core value for said vehicle by said core adjustment values for said vehicle in accordance with the vehicle condition information provided by the customer.

6.   A system as in claim 5, wherein said vehicle condition information includes the condition of at least one of the following features of the vehicle: mileage, bumpers, exterior body, windshields, tires, seats, door panels, dashboard, and frame.

7. A system as in claim 6, wherein the condition of the exterior body of the vehicle is specified by the customer by identifying a number of dents, dings, and scratches in respective panels of said exterior body of said vehicle.

8. A system as in claim 7, wherein said web pages include flaw screens for each feature of the vehicle and a navigation graphic that enables the customer to select a flaw screen for each vehicle feature.

9. A system as in claim 1, wherein said web server assigns a session number to each vehicle appraisal session by a customer whereby the customer may recall a complete or partially completed vehicle appraisal session at a later time using said session number.

10. A system as in claim 1, wherein said web server presents a printable appraisal sheet to the customer that is printed by the customer and used to collect said vehicle condition information for entry by the customer during a vehicle appraisal session.

11. An on-line vehicle appraisal system for appraising a value of a vehicle, comprising:

a database containing vehicle data for a plurality of vehicles, including said vehicle, said database being accessible by a customer via a data network;

a web page memory that stores web pages for presentation to the customer by said web server in a predetermined sequence, said presented web pages eliciting information from the customer including at least the condition of a plurality of features of said vehicle;

a processor that calculates the value of said vehicle by processing vehicle data stored in said database for said vehicle and the vehicle condition information provided by the customer in response to the presented web pages using an objective vehicle valuation algorithm; and

a web server connected to said data network, said web server presenting vehicle data and web pages to the customer via said data network, said web server further presenting a printable certificate to the customer listing the calculated value of said vehicle and the vehicle data and vehicle condition information for said vehicle.

12. An on-line vehicle purchasing system, comprising:

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a first web server connected to a data network accessible by a customer, said first web server presenting data to the customer via a first web site and receiving data from the customer for the creation of a vehicle purchase transaction;

a second web server connected to the data network, said second web server presenting a second web site containing a link to said first web site that is accessed when a customer of the first web site wishes to inquire about the value of a vehicle trade-in to be used as part of the consideration in said vehicle purchase transaction;

a database containing vehicle data for a plurality of vehicles, including said vehicle trade-in, said database being accessible by the customer via said second web server;

a web page memory that stores web pages for presentation to the customer by said second web server in a predetermined sequence, said presented web pages eliciting information from the customer including at least the condition of a plurality of features of said vehicle trade-in; and

a processor that calculates the value of said vehicle trade-in by processing vehicle data stored in said database for said vehicle trade-in and the vehicle condition information provided by the customer in response to the presented web pages using an objective vehicle valuation algorithm, whereby the value of said vehicle trade-in is included in the completion of said on-line vehicle purchase transaction.

13.   A method of providing vehicle appraisal services for appraising a value of a vehicle, comprising the steps of:

providing a node on a data network accessible by potential customers, said node including a database containing vehicle data for a plurality of vehicles, said database being accessible by a customer via a customer interface to said data network;

presenting pages of data to said customer interface for eliciting information from the customer including at least the condition of a plurality of features of a vehicle to be appraised;

calculating the value of said vehicle from vehicle value data stored in said database for the vehicle and from condition information provided by the customer in response to the presented pages using an objective vehicle valuation algorithm; and

presenting said value to said customer as an actual appraised value of said vehicle.

14.   A method as in claim 13, including the additional step of presenting a printable certificate to the customer listing the calculated value of said vehicle and the vehicle data and vehicle condition information for said vehicle.

15.   A method as in claim 13, including the additional step of storing a vehicle identification number (VIN) for each vehicle and a listing of the year, make, model, and manufacturer options for each vehicle in said database as said vehicle data.

16.   A method as in claim 13, including the additional step of storing a core value and core adjustment values for each feature condition that are unique to each vehicle in said database for use as default values by said vehicle valuation algorithm.

17.   A method as in claim 16, wherein said calculating step includes the step of adjusting said core value for said vehicle by said core adjustment values for said vehicle in accordance with the vehicle condition information provided by the customer.

18.   A method as in claim 17, wherein said vehicle condition information includes the condition of at least one of the following features of the vehicle: mileage, bumpers, exterior body, windshields, tires, seats, door panels, dashboard, said method including the additional step of presenting a navigation graphic to the customer for selection of flaw screens for each feature of the vehicle.

19. A method as in claim 13, including the additional step of assigning a session number to each vehicle appraisal session by a customer whereby the customer may recall a complete or partially completed vehicle appraisal session at a later time using said session number.

20.   A method as in claim 13, including the additional step of providing a printable appraisal sheet to the customer that is printed by the customer and used to collect said vehicle condition information for entry by the customer during a vehicle appraisal session.

21.   A method of providing vehicle appraisal services for appraising a value of a vehicle, comprising the steps of:

providing a customer with a printable vehicle appraisal sheet identifying types of damage and wear that said vehicle may endure, said vehicle appraisal sheet further eliciting vehicle condition information including at least the condition of a plurality of features of said vehicle;

providing a node on a data network accessible by the customer, said node including a database containing vehicle data for a plurality of vehicles, including said vehicle, said database being accessible by the customer via a customer interface to said data network;

presenting pages of data to said customer interface requesting that said customer enter said vehicle condition information from said vehicle appraisal sheet;

calculating the value of said vehicle from vehicle value data stored in said database for the vehicle and from vehicle condition information provided by the customer in response to the presented pages using an objective vehicle valuation algorithm; and

presenting said value to said customer as an actual appraised value of said vehicle.

22. A method of selling vehicles on-line, comprising the steps of:

creating over a data network an on-line vehicle purchase transaction for the purchase of a designated vehicle from an on-line vehicle merchant, whereby part of the financial consideration for the purchase of said designated vehicle is a value of a trade-in vehicle;

appraising a value of said trade-in vehicle by performing the steps of:

accessing a node connected to said data network, said node

presenting web pages to the customer eliciting information from the

customer including at least the condition of a plurality of features of the

trade-in vehicle, and

calculating the value of said trade-in vehicle from vehicle value

data stored in a database containing vehicle data for a plurality of

vehicles, including said trade-in vehicle, and from vehicle condition

information provided by the customer in response to the presented pages

using an objective vehicle valuation algorithm, and

presenting said value to said customer as an actual appraised value

of said vehicle; and

including the appraised value of said trade-in vehicle as said part of the financial consideration for the purchase of said designated vehicle.

23. A method as in claim 22, wherein said on-line vehicle purchase transaction creation step is performed on a first web site and said vehicle appraising step is performed on a second web site connected to said first web site via a link.

24. A method of managing inventory of leased or rented vehicles, comprising the steps of:

appraising a cash value of each vehicle available for rent or lease using an on-line vehicle appraisal system that accepts condition information about each vehicle available for rent or lease and receiving from said on-line vehicle appraisal system a first condition report including at least the condition information and cash value of each said vehicle;

appraising a cash value of each vehicle returned from rent or lease using said on-line vehicle appraisal system and receiving from said on-line vehicle appraisal system a second condition report including at least the condition information and cash value of each returned vehicle; and

maintaining a database of said first and second condition reports for each vehicle in inventory.

25. A method as in claim 24, comprising the additional step of charging the rentee/lessee of each vehicle returned from rent or lease for the differential between (a) the difference between said first and second condition reports and (b) the rent/lease value paid.

26. A method as in claim 24, comprising the additional step of posting said second condition report on a web site with at least one representation of said vehicle for sale.

27. A method as in claim 24, wherein each of said appraising steps comprise the steps of:

accessing a node connected to a data network, said node presenting web pages eliciting information from a customer including at least the condition of a plurality of features of the vehicle to be appraised,

calculating the value of said vehicle to be appraised from vehicle value data stored in a database containing vehicle data for a plurality of vehicles, including said vehicle to be appraised, and from vehicle condition information provided by the customer in response to the presented pages using an objective vehicle valuation algorithm, and

presenting said value to said customer as an actual appraised value of said vehicle.

28. A method of selling used vehicles on-line, comprising the steps of:

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appraising a cash value of a vehicle to be sold on-line using an on-line vehicle appraisal system that accepts condition information about the vehicle and receiving from said on-line vehicle appraisal system a condition report including at least the condition information and cash value of said vehicle;

and

posting said condition report on a web site with at least one picture of said vehicle.

29.   A method as in claim 28, wherein said appraising step comprises the steps of:

accessing a node connected to a data network, said node presenting web pages eliciting information from a customer including at least the condition of a plurality of features of the vehicle to be appraised;

calculating the value of said vehicle to be appraised from vehicle value data stored in a database containing vehicle data for a plurality of vehicles, including said vehicle to be appraised, and from vehicle condition information provided by the customer in response to the presented pages using an objective vehicle valuation algorithm; and

presenting said value to said customer as an actual appraised value of said vehicle.

FIGURE 1
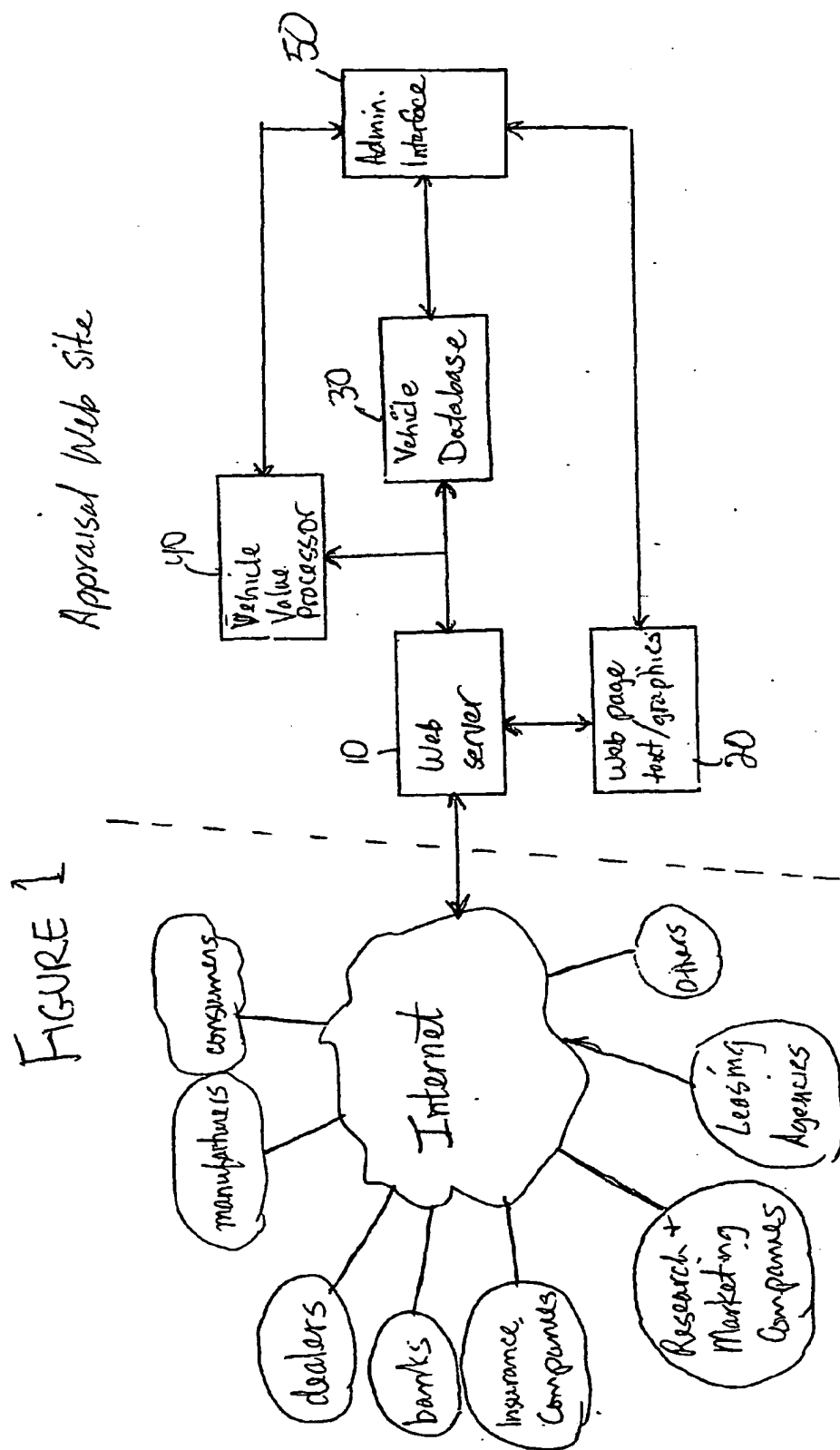
By using our Auto|Cash|Value Determination System © as your guide, your are guaranteed to get the best value for your vechicle. Our system will take you through, *step-by-step*, and allow you to tell us as much about your car as you can in order to provide you with an estimate of how much your car is worth in the *real* car buyer's market. Our databases are updated **around the clock** to ensure you get the most accurate determination of your car.

Your zip code:
19103

Your car's mileage:
21083

Car
Mileage:
Year:
Make:
Model:
Body:
Transmission:
Options
Colors
Exterior:
Interior:

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FIGURE 2

Please select your vehicle's year:

1998

Car
Mileage: 21083
Year: 1998
Make:
Model:
Body:
Transmission:
Options
Colors
Exterior:
Interior:

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FIGURE 3

Please select your vehicle's make:

Mercedes

Car
Mileage: 21083
Year: 1998
Make:
Model:
Body:
Transmission:

Options

Colors

Exterior:
Interior:

hat's my car
REALLY
worth?

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FIGURE 4

FIGURE 5A

Please select your vehicle's model:

Model	Body Type	Transmission
C230	4 DOOR SEDAN	5 SPEED AUTOMATIC
C280	4 DOOR SEDAN	5 SPEED AUTOMATIC
C43	4 DOOR SEDAN	5 SPEED AUTOMATIC
CL500	2 DOOR COUPE	5 SPEED AUTOMATIC
CL600	2 DOOR COUPE	5 SPEED AUTOMATIC
CLK320	2 DOOR COUPE	5 SPEED AUTOMATIC
E300	4 DOOR SEDAN	5 SPEED AUTOMATIC
E320	4 DOOR SEDAN	5 SPEED AUTOMATIC
E320	WAGON	5 SPEED AUTOMATIC
E320 4MATIC	4 DOOR SEDAN	5 SPEED AUTOMATIC AWD
E320 4MATIC	WAGON	5 SPEED AUTOMATIC AWD
E430	4 DOOR SEDAN	5 SPEED AUTOMATIC
ML320	4 DOOR SUV	5 SPEED AUTOMATIC 4WD
S320	4 DOOR SEDAN	5 SPEED AUTOMATIC
S320 LWB	4 DOOR SEDAN	5 SPEED AUTOMATIC
S420	4 DOOR SEDAN	5 SPEED AUTOMATIC
S500	4 DOOR SEDAN	5 SPEED AUTOMATIC
S600	4 DOOR SEDAN	5 SPEED AUTOMATIC
	2 DOOR	5 SPEED

Car
Mileage: 21083
Year: 1998
Make: Mercedes
Model:
Body:
Transmission:
Options
Colors
Exterior:
Interior:

hat's my car REALLY worth ?

9

<u>SL500</u>	ROADSTER	AUTOMATIC
<u>SL600</u>	2 DOOR ROADSTER	5 SPEED AUTOMATIC
<u>SLK230</u>	2 DOOR ROADSTER	5 SPEED AUTOMATIC

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FIGURE 5B

Car Options Color Exterior Interior Accessories Value

In addition to standard equipment, the following options were available for the 1998 Mercedes E430.
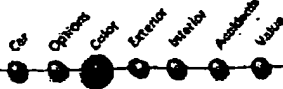
Please select any options installed in your vehicle:

✓ Option   Glass Sunroof

✓ Option   CD Changer (factory)

✓ Option   Heated Front Seats

✓ Option   Xenon Headlights

   Option   Rear Sun Shade

   Package Sports Package - AMG wheels and body kit

Car
Mileage: 21083
Year: 1998
Make: Mercedes
Model: E430
Body: 4 DOOR SEDAN
Transmission: 5 SPEED AUTOMATIC

Options

Colors
Exterior:
Interior:

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FIGURE 6

The following exterior colors were available for the 1998 Mercedes E430.

Please select your vehicle's exterior paint color:

Moonstone
Aspen Green
Black
Black opal
Glacier White
Brilliant Emerald
Ruby
Smoke Silver
Brilliant Silver
Obsidian Black
Cypress Green
Royal Indago
Azure Blue
Midnight Blue

Car
Mileage: 21083
Year: 1998
Make: Mercedes
Model: E430
Body: 4 DOOR SEDAN
Transmission: 5 SPEED AUTOMATIC

Options
Option Glass Sunroof
Option CD Changer (factory)
Option Heated Front Seats
Option Xenon Headlights

Colors
Exterior:
Interior:

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FIGURE 7

Car · Options · Color · Exterior · Interior · Accidents · Value

The following interior schemes were available for the 1998 Mercedes E430.

Please select your vehicle's interior color scheme:

Black
Parchment
Blue
Grey
Saddle

Car
Mileage: 21083
Year: 1998
Make: Mercedes
Model: E430
Body: 4 DOOR SEDAN
Transmission: 5 SPEED AUTOMATIC

Options
Option Glass Sunroof
Option CD Changer (factory)
Option Heated Front Seats
Option Xenon Headlights

Colors
Exterior: Ruby
Interior:

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FIGURE 8

Car
Hood
Roof
Fender
Doors

Quarter
Deck Lid
Rear Bumper
Windshields
Tires

Please describe your vehicle's front bumper:

No damage

Repainted: No   Replaced: No

Car
Mileage: 21083
Year: 1998
Make: Mercedes
Model: E430
Body: 4 DOOR SEDAN
Transmission: 5 SPEED AUTOMATIC

Options
Option Glass Sunroof
Option CD Changer (factory)
Option Heated Front Seats
Option Xenon Headlights

Colors
Exterior: Ruby
Interior: Grey

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FIGURE 9

Car   Options   Color   Exterior   Interior   Accessories   Value

Car

Front Bumper   Quarter   Mileage: 21083
Roof   Deck Lid   Year: 1998
Fender   Rear Bumper   Make: Mercedes
Doors   Windshields   Model: E430
                                                    Tires   Body: 4 DOOR SEDAN

Please describe the hood of your car:

Transmission: 5 SPEED
AUTOMATIC

Dents: **Dings:**   **Scratches:**
No dents [?]   No dings [?]   No scratches [?]

Options

Option Glass Sunroof

Option CD Changer
(factory)

Option Heated Front
Seats

Repainted: No   Replaced: No

Option Xenon Headlights

Colors

Exterior: Ruby

Interior: Grey

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FIGURE 10

Car Options Color Exterior Interior Antique Value

Car

Front Bumper

Hood

Fender

Doors

Quarter

Deck Lid

Rear Bumper

Windshields

Tires

Mileage: 21083

Year: 1998

Make: Mercedes

Model: E430

Body: 4 DOOR SEDAN

Transmission: 5 SPEED AUTOMATIC

Please describe the roof of your car:

Options

Option Glass Sunroof

Option CD Changer (factory)

Dents: **Dings:**   **Scratches:**

No dents [ ] [?]   No dings [ ] [?]   No scratches [ ] [?]

Option Heated Front Seats

Option Xenon Headlights

Colors

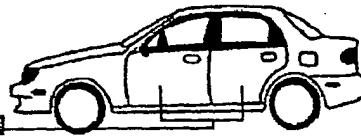Repainted: No [ ]   Replaced: No [ ]

Exterior: Ruby

Interior: Grey

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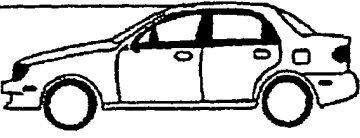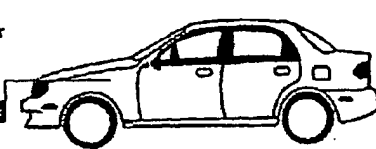
FIGURE 11

Front Bumper
Hood
Roof

Doors

Quarter
Deck Lid
Rear Bumper
Windshields
Tires

Please describe the fender of your car:

Driver's Side-
Dents: | **Dings:** | **Scratches:**
2 dents [?] | 1 ding [?] | 1 scratch [?]

Repainted: No   Replaced: No

Passenger's Side-
Dents: | **Dings:** | **Scratches:**
No dents [?] | 4 or more [?] | 1 scratch [?]

Repainted: No   Replaced: No

Car
Mileage: 21083
Year: 1998
Make: Mercedes
Model: E430
Body: 4 DOOR SEDAN
Transmission: 5 SPEED AUTOMATIC

Options
Option Glass Sunroof
Option CD Changer (factory)
Option Heated Front Seats
Option Xenon Headlights

Colors
Exterior: Ruby
Interior: Grey

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FIGURE 12

Car · Options · Color · Exterior · Interior · Accidents · Value
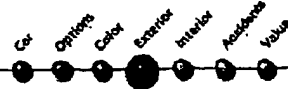
Front Bumper
Hood
Roof
Fender

Quarter
Deck Lid
Rear Bumper
Windshields
Tires

Car

Mileage: 21083

Year: 1998

Make: Mercedes

Model: E430

Body: 4 DOOR SEDAN

Transmission: 5 SPEED AUTOMATIC

Please describe the doors of your car:

Driver's Side-

Dents:	Dings:	Scratches:
1 dent	4 or more	2 scratches

Repainted: No   Replaced: No

Passenger's Side-

Dents:	Dings:	Scratches:
No dents	2 dings	1 scratch

Repainted: No   Replaced: No

Options

Option Glass Sunroof

Option CD Changer (factory)

Option Heated Front Seats

Option Xenon Headlights

Colors

Exterior: Ruby

Interior: Grey

FIGURE 13

Car

Options   Color   Exterior   Interior   Accidents   Value

Front Bumper
Hood
Roof
Fender
Doors

Deck Lid
Rear Bumper
Windshields
Tires

Please describe the quarter of your car:

Driver's Side-

Dents:	Dings:	Scratches:
No dents ▦ ？	1 ding ▦ ？	2 scratches ▦ ？

Repainted: No ▦   Replaced: No ▦

Passenger's Side-

Dents:	Dings:	Scratches:
No dents ▦ ？	No dings ▦ ？	No scratches ▦ ？

Repainted: No ▦   Replaced: No ▦

Car

Mileage: 21083

Year: 1998

Make: Mercedes

Model: E430

Body: 4 DOOR SEDAN

Transmission: 5 SPEED AUTOMATIC

Options

Option Glass Sunroof

Option CD Changer (factory)

Option Heated Front Seats

Option Xenon Headlights

Colors

Exterior: Ruby

Interior: Grey

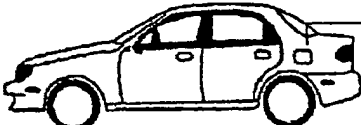PRINTABLE FORM | WHO WE ARE | JOBS | INVEST | HELP | DISCLAIMER

FIGURE 14

Car | Options | Color | Exterior | Interior | Accidents | Value

Front Bumper | Quarter
Hood | Rear Bumper
Roof | Windshields
Fender | Tires
Doors

Please describe the deck lid of your car:

Dents: | Dings: | Scratches:
No dents [▼] [?] | No dings [▼] [?] | No scratches [▼] [?]

Repainted: No [▼]   Replaced: Yes [▼]

Car

Mileage: 21083

Year: 1998

Make: Mercedes

Model: E430

Body: 4 DOOR SEDAN

Transmission: 5 SPEED AUTOMATIC

Options

Option Glass Sunroof

Option CD Changer (factory)

Option Heated Front Seats

Option Xenon Headlights

Colors

Exterior: Ruby

Interior: Grey

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FIGURE 15

Car Options Color Exterior Interior Accidents Value

Front Bumper
Hood
Roof
Fender
Doors

Quarter
Deck Lid
Rear Bumper
Windshields
Tires

Please describe the rear bumper of your car:

| No damage |

Repainted: No   Replaced: Yes

Car

Mileage: 21083

Year: 1998

Make: Mercedes

Model: E430

Body: 4 DOOR SEDAN

Transmission: 5 SPEED AUTOMATIC

Options

Option Glass Sunroof

Option CD Changer (factory)

Option Heated Front Seats

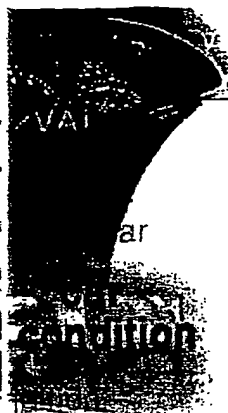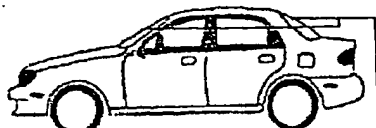Option Xenon Headlights

Colors

Exterior: Ruby

Interior: Grey

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FIGURE 16

Car Options Color Exterior Interior Accidents Value

Front Bumper
Hood
Roof
Fender
Doors

Quarter
Deck Lid
Rear Bumper
Windshield
Tires

Please describe the windshield and rear glass of your car:
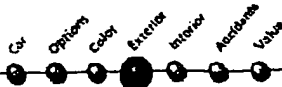
Windshield - | 1 star | ☑ |

Rear Glass - | Fogged | ☑ |

< Back

Next >

Car
Mileage: 21083
Year: 1998
Make: Mercedes
Model: E430
Body: 4 DOOR SEDAN
Transmission: 5 SPEED AUTOMATIC

Options
Option Glass Sunroof
Option CD Changer (factory)
Option Heated Front Seats
Option Xenon Headlights

Colors
Exterior: Ruby ·
Interior: Grey

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FIGURE 17

Car   Options   Color   Exterior   Interior   Accidents   Value
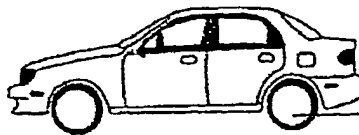
Front Bumper
Hood
Roof
Fender
Doors

Quarter
Deck Lid
Rear Bumper
Windshields

Please describe the tires of your car:

Driver's Side-
Front [50%-75% Tread] Rear [50%-75% Tread]

Passenger's Side-
Front [50%-75% Tread] Rear [50%-75% Tread]

Please describe the wheels (rims) of your car:

Driver's Side-
Front [No damage] Rear [No damage]

Passenger's Side-
Front [No damage] Rear [Bent]

Car
Mileage: 21083
Year: 1998
Make: Mercedes
Model: E430
Body: 4 DOOR SEDAN
Transmission: 5 SPEED AUTOMATIC

Options
Option Glass Sunroof
Option CD Changer (factory)
Option Heated Front Seats
Option Xenon Headlights

Colors
Exterior: Ruby
Interior: Grey

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FIGURE 18

Car   Options   Color   Exterior   Interior   Accidents   Value

Car
Mileage: 21083
Year: 1998
Make: Mercedes
Model: E430
Body: 4 DOOR SEDAN
Transmission: 5 SPEED AUTOMATIC

Seats   Doorpanel   Dashboard

Please describe the condition of the seats:

Options
Option Glass Sunroof
Option CD Changer (factory)
Option Heated Front Seats
Option Xenon Headlights

Driver's seat:

Rips: [1 rip] [?]   Burns: [No burns] [?]

Tears: [No tears] [?]   Stains: [1 stain] [?]

Colors
Exterior: Ruby
Interior: Grey

Passenger's seat:

Rips: [No rips] [?]   Burns: [No burns] [?]

Tears: [No tears] [?]   Stains: [No stains] [?]

All rear seats:

Rips: [No rips] [?]   Burns: [No burns] [?]

Tears: [No tears] [?]   Stains: [No stains] [?]

[Back]   [Next]

[HOME] | [PRINTABLE FORM] | [WHO WE ARE] | [JOBS] | [INVEST] | [HELP] | [DISCLAIMER]

FIGURE 19

Car

Mileage: 21083

Year: 1998

Make: Mercedes

Model: E430

Body: 4 DOOR SEDAN

Transmission: 5 SPEED AUTOMATIC

Seats   Doorpanel   Dashboard

Please describe the condition of the interior doorpanel:

Options

Option Glass Sunroof

Option CD Changer (factory)

Option Heated Front Seats

Option Xenon Headlights

Colors

Exterior: Ruby

Interior: Grey

Driver's side doorpanel:

Rips: No rips [✓] [?]   Burns: No burns [✓] [?]

Tears: No tears [✓] [?]   Stains: No stains [✓] [?]

Passenger's side doorpanel:

Rips: No rips [✓] [?]   Burns: No burns [✓] [?]

Tears: No tears [✓] [?]   Stains: No stains [✓] [?]

All rear doorpanels:

Rips: No rips [✓] [?]   Burns: No burns [✓] [?]

Tears: No tears [✓] [?]   Stains: No stains [?] [?]

FIGURE 20

Please describe the condition of the interior dash:

Seats   Doorpanel   Dashboard

Rips: No rips [×] [?]   Burns: No burns [×] [?]

Tears: No tears [×] [?]   Stains: 3 or more [×] [?]

Car
Mileage: 21083
Year: 1998
Make: Mercedes
Model: E430
Body: 4 DOOR SEDAN
Transmission: 5 SPEED AUTOMATIC

Options
Option Glass Sunroof
Option CD Changer (factory)
Option Heated Front Seats
Option Xenon Headlights

Colors
Exterior: Ruby
Interior: Grey

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FIGURE 21
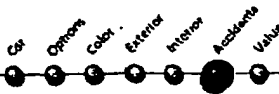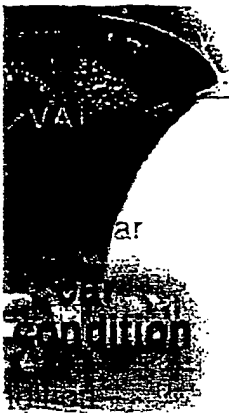
Please describe any frame damage:

Frame damage: Moderate (repaired)

Car
Mileage: 21083
Year: 1998
Make: Mercedes
Model: E430
Body: 4 DOOR SEDAN
Transmission: 5 SPEED AUTOMATIC

Options
Option Glass Sunroof
Option CD Changer (factory)
Option Heated Front Seats
Option Xenon Headlights

Colors
Exterior: Ruby
Interior: Grey

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FIGURE 22

Aut | Cash | Value .com
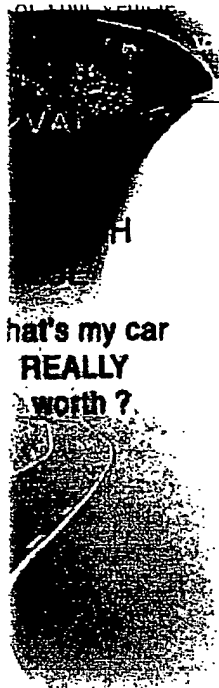## Your Trade-In Value

$ 34711.00

Option Glass Sunroof is worth 1100. (Total: 1100.00)
Option CD Changer (factory) is worth 275. (Total: 1375.00)
Option Heated Front Seats is worth 75. (Total: 1450.00)
Option Xenon Headlights is worth 250. (Total: 1700.00)
Group ID: 2
Base value: 38350; minvalue 26000; maxvalue 44000;
region shift: **0** (Value: 38350.00)
option shift: **1700.00** (Value: 40050.00)
Ext. Color shift: **0** (Value: 40050.00)
Int. Scheme shift **0**: (Value: 40050.00)

Mileage Calculation:
user's miles: 21083, parmiles 19000; perthousand 300; percentoverpar 20;
Mileage: 2083.00 at 300/1000 times 1 is 624.00
Mileage: 0 at 300/1000 times .5 is 0
Mileage shift -624.00 is not less than half of base value -19175.00.
Total mileage shift: **-624.00** (Value: 39426.00)

Exterior Damage Adjustments:

hood: [0 * 40] dings; [0 * 325] dents; [0 * 325] scratches; hood shift is **0.00** (Value: 39426.00)
roof: [0 * 40] dings; [0 * 325] dents; [0 * 325] scratches; roof shift is **0.00** (Value: 39426.00)
DSFP: [1 * 40] dings; [2 * 325] dents; [1 * 325] scratches; max damage for section is 150 dsfp shift is **150** (Value: 39276.00)
psfp: [4 * 40] dings; [0 * 325] dents; [1 * 325] scratches; max damage for section is 150 psfp shift is **150** (Value: 39126.00)
dsdoor: [4 * 40] dings; [1 * 325] dents; [2 * 325] scratches; max damage for section is 150 dsdoor shift is **150** (Value: 38976.00)
psdoor: [2 * 40] dings; [0 * 325] dents; [1 * 325] scratches; max damage for section is 150 psdoor shift is **150** (Value: 38826.00)
dsrp: [1 * 40] dings; [0 * 325] dents; [2 * 325] scratches; max damage for section is 150 dsrp shift is **150** (Value: 38676.00)
psrp: [0 * 40] dings; [0 * 325] dents; [0 * 325] scratches; psrp shift is **0.00** (Value: 38676.00)
trunk: [0 * 40] dings; [0 * 325] dents; [0 * 325] scratches; 150 for replaced; trunk shift is **150.00** (Value: 38526.00)

Car
Mileage: 21083
Year: 1998
Make: Mercedes
Model: E430
Body: 4 DOOR SEDAN
Transmission: 5 SPEED AUTOMATIC
Options
Option Glass Sunroof
Option CD Changer (factory)
Option Heated Front Seats
Option Xenon Headlights
Colors
Exterior: Ruby
Interior: Grey

nterior Damage Adjustments:

dash: [0 * 300] rips; [0 * 50] burns; [3 * 100]
stains; [0 * 50] tears; dash shift is **300.00** (Value:
38226.00)
dsdoorpanel: [0 * 300] rips; [0 * 50] burns; [0 *
100] stains; [0 * 50] tears; dsdoorpanel shift is
0.00 (Value: 38226.00)
psdoorpanel: [0 * 300] rips; [0 * 50] burns; [0 *
100] stains; [0 * 50] tears; psdoorpanel shift is
0.00 (Value: 38226.00)
reardoorpanel: [0 * 300] rips; [0 * 50] burns; [0 *
100] stains; [0 * 50] tears; reardoorpanel shift is
0.00 (Value: 38226.00)
dsseat: [1 * 300] rips; [0 * 50] burns; [1 * 100]
stains; [0 * 50] tears; max damage for section is
300 dsseat shift is **300** (Value: 37926.00)
psseat: [0 * 300] rips; [0 * 50] burns; [0 * 100]
stains; [0 * 50] tears; psseat shift is **0.00** (Value:
37926.00)
rearseat: [0 * 300] rips; [0 * 50] burns; [0 * 100]
stains; [0 * 50] tears; rearseat shift is **0.00**
(Value: 37926.00)
Subtract 0 for front bumper condition 0.
Subtract 0.00 for front bumper. (37926.00)
Subtract 150 for rear bumper replaced.
Subtract 0 for rear bumper condition 0.
RB shift so far is 150.00. Rear Bumper max is
135
Subtract **135** for rear bumper. (37791.00)
Subtract **40** for front windshield. (37751.00)
Subtract **140** for rear windshield. (37611.00)
Subtract **50** for dsf tire. (37561.00)
Subtract **50** for dsr tire. (37511.00)
Subtract **50** for psf tire. (37461.00)
Subtract **50** for psr tire. (37411.00)
Subtract **0** for dsf wheel. (37411.00)
Subtract **0** for dsr wheel. (37411.00)
Subtract **0** for psf wheel. (37411.00)
Subtract **100** for psr wheel. (37311.00)
Frame damage: frame_moderate. Subtract 2600.
(34711.00)
Minimum value is 26000. Value is now
34711.00
Maximum value is 44000. Value is now
34711.00
34711.00

FIGURE 23B

Printable Certificate

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AUTO|CASH|VALUE.COM

CERTIFICATE OF VALUE

Year / Make / Model: 1998 / Mercedes / E430
Miles: 21083
Body Type: 4 DOOR SEDAN
Transmission: 5 SPEED AUTOMATIC
Exterior Color: Ruby
Interior Scheme: Grey

Options:
Option Glass Sunroof
Option CD Changer (factory)
Option Heated Front Seats
Option Xenon Headlights

Damage:
The trunk was replaced.
The rear bumper was replaced.
There were 1 ding(s) on the driver's side front panel.
There were 4 ding(s) on the passenger's side front panel.
There were 2 ding(s) on the passenger's side door.
There were 1 ding(s) on the driver's side rear panel.
There were 2 dent(s) on the driver's side front panel.
There were 1 dent(s) on the driver's side door.
There were 1 scratch(es) on the driver's side front panel.
There were 1 scratch(es) on the passenger's side front panel.
There were 2 scratch(es) on the driver's side door.
There were 1 scratch(es) on the passenger's side door.
There were 2 scratch(es) on the driver's side rear panel.
The driver's side front tire had a condition of 50%-75% Tread
The passenger's side front tire had a condition of 50%-75% Tread
The driver's side front tire had a condition of 50%-75% Tread
The passenger's side front tire had a condition of 50%-75% Tread
The passenger's side front wheel had a condition of No damage
The dash had 3 stain(s).
The driver's side seat had 1 rip(s).
The driver's side seat had 1 stain(s).
The damage to the front windshield is: 1 star.
The damage to the rear glass is: Fogged.
There was moderate frame damage to the car that was repaired.

Your car's Auto Cash Value: **$34711.00**

FIGURE 24

ACV Printable Form

Auto Cash Value - Printable Form

Zipcode:	Vehicle's Year:	Vehicle's Make:	Options (if applicable):

FIGURE 25A

Car mileage:	Vehicle Model:	Exterior Paint Color:	Interior Color Scheme:

Definitions:

Repainted - if a panel was previously refinished by a body shop.

Replaced- If a panel was previously changed by a body shop. Not the original panel that came on the car when it was new.

A **Star** is a small chip in the glass with no legs or stresses. Legs are lines coming from the star or chip that will eventually turn into cracks.

A **Crack** is an elongated line in a windshield. A crack will result in the replacement of the glass.

Fogged - a fogged windshield is one that allows air/moisture to penetrate into the glass. It will be noticeable by a cloudy white substance in the glass. This normally occurs in the corners of the glass.

A **Ding** is a small impression, normally caused by someone opening a door into your car. A dent is approximately the size of a nickel and has not broken the paint surface of the vehicle.

A **Dent** is an impression in the body that is either larger than a nickel or has broken the pain surface of the vehicle.

A **Scratch**: *On the Bumper*- any imperfection in the painted surface of the bumper without damaging the actual material the bumper is made from. *On the Body Section*-a scratch is a line in the paint surface that has broken the painted surface of the vehicle and is stronger than half of an inch.

A **Burn** is where an area of the interior fabric that was damaged by extreme heat.

A **Rip** is a slice or hole in the interior fabric, that is smaller than the size of an eraser head on a #2 pencil.

A **Tear**: *On the Bumper*- any imperfection in the painted surface of the bumper without damaging the actual material the bumper is made from.
Interior- any slice or hole in the interior fabric that is larger than the size of an eraser head on #2 pencil.

A **Stain** is any discoloration to the interior fabric that cannot be removed with normal cleaning solvents.

* * * Exterior * * *
Circle the type of damage for each category and check a box, if applicable.

Front Bumper:	None	Scratched	Tear	Severely Damaged	Repainted	Replaced
Rear Bumper:	None	Scratched	Tear	Severely Damaged	Repainted	Replaced
Windshield:	None	1star 2star 3star	Cracked	Fogged	Replaced	
Rear Glass:	None	1star 2star 3star	Cracked	Fogged	Replaced	
Frame Damage:	None	Minor(repaired)	Moderate(repaired)	Major(repaired)	Damage(not repaired)	

Tires

Driver's Front:	None	25% tread or less	25%-50% tread	50%-75% tread	more than 75% tread
Driver's Rear:	None	25% tread or less	25%-50% tread	50%-75% tread	more than 75% tread
Passenger's Front:	None	25% tread or less	25%-50% tread	50%-75% tread	more than 75% tread
Passenger's Rear:	None	25% tread or less	25%-50% tread	50%-75% tread	more than 75% tread

Wheels/Rims

Driver's Front:	None	Bent	Damaged
Driver's Rear:	None	Bent	Damaged
Passenger's Front:	None	Bent	Damaged
Passenger's Rear:	None	Bent	Damaged

ACV Printable Form

For the following, please write either N (for none), 1, 2, 3, or 4+ (for 4 or more) of each Dings, Dents, and Scratches;
check a box if applicable.

Hood	Roof	Fender- Driver's Side	Fender- Passenger's Side
Dings:	Dings:	Dings:	Dings:
Dents:	Dents:	Dents:	Dents:
Scratches:	Scratches:	Scratches:	Scratches:
Repainted	Repainted	Repainted	Repainted
Replaced	Replaced	Replaced	Replaced

2 Door Vehicle   **4 Door Vehicle**

Driver's Side:	Passenger's Side:	Driver's Side - Front:	Passenger's Side - Front:
Dings:	Dings:	Dings:	Dings:
Dents:	Dents:	Dents:	Dents:
Scratches:	Scratches:	Scratches:	Scratches:
Repainted	Repainted	Repainted	Repainted
Replaced	Replaced	Replaced	Replaced
		Driver's Side - Rear:	Passenger's Side - Rear:
		Dings:	Dings:
		Dents:	Dents:
		Scratches:	Scratches:
		Repainted	Repainted
		Replaced	Replaced

Quarter- Passenger's Side	Quarter- Driver's Side	Trunk/Decklid
Dings:	Dings:	Dings:
Dents:	Dents:	Dents:
Scratches:	Scratches:	Scratches:
Repainted	Repainted	Repainted
Replaced	Replaced	Replaced

* * * Interior * * *

For the following, please write either N (for none), 1, 2, 3, or 3+ for each category.

Dash	Doorpanel		Seats	
	Driver's Side:	Passenger's Side:	Driver's Side:	Passenger's Side:
Rips:	Rips:	Rips:	Rips:	Rips:
Burns:	Burns:	Burns:	Burns:	Burns:
Tears:	Tears:	Tears:	Tears:	Tears:
Stains:	Stains:	Stains:	Stains:	Stains:

All Rear Doorpanels	All Rear Seats
Rips:	Rips:
Burns:	Burns:
Tears:	Tears:
Stains:	Stains:

FIGURE 25B

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(25) Filing Language: English

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(74) Agents: CALDWELL, John, W. et al.; Woodcock Wash-
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19103 (US).

(81) Designated States (national): CA, JP, KR.

(84) Designated States (regional): European patent (AT, BE,
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NL, PT, SE, TR).

Published:
— with international search report

(88) Date of publication of the international search report:
18 July 2002

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: ON-LINE VEHICLE APPRAISAL SYSTEM

(57) Abstract: A web site and an associated business method that enables on-line appraisal of a particular vehicle and assigns an actual cash value to that particular vehicle so that the actual trade-in value may be included as part of the on-line purchase of another new or used vehicle. A mechanism is provided whereby on-line vehicle retailers may take into account the value of used vehicle trade-ins so that the entire vehicle purchasing transaction may be completed on-line from the comfort of the purchaser's home. The web site prompts the customer to input all of the information that is needed to make a complete appraisal, including detailed vehicle condition information, and provides a value that is accurate for the customer's vehicle. Once the appraisal is complete, a comprehensive summary page or "certificate" is printed that is submitted as part of the on-line purchase transaction. Then, when the new vehicle is delivered, the summary sheet is compared to the actual vehicle provided for trade-in and any final adjustments based on objective criteria are made as appropriate. The vehicle appraisal web site of the invention may also be used to perform inventory management of used vehicles, including providing a method of charging the lessee of each vehicle returned from lease for the differential between (a) the difference between the pre-lease and post-lease condition reports and (b) the lease value paid. On-line sales of used vehicles may also be facilitated by posting the condition reports on a web site with at least one picture of the used vehicle for sale.

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) :G06F 17/60

US CL :705/26, 27, 37

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 705/26, 27, 37

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Please See Extra Sheet.

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Extra Sheet.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,493,490 A (Johnson) 20 Feb. 1996, see the whole patent.	1-29
Y	From http://www.kbb.com/, kbb.com - guiding the car buyer, 1 page.	1-29
Y	DUCHEN ET AL., System for assisting user in dertermining valuation of motor vehicle for trade-in, re-sale, insuranceor financing purposes..., (DERWENT-ACC-NO: 1999-508981), 28 July 1999, see the novelty , the use, and advantage on page 1.	1-29

[X] Further documents are listed in the continuation of Box C. [ ] See patent family annex.

*	Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance		
"E"	earlier document published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed	"&"	document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
01 FEBRUARY 2002	**1 5 MAR 2002**

Name and mailing address of the ISA/US	Authorized officer
Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231	CUONG H. NGUYEN
Facsimile No. (703) 305-3230	Telephone No. (703) 305-4553

Form PCT/ISA/210 (second sheet) (July 1998)*

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A, E	OKADA, Device and method of calculating a residual value of an apparatus based on a history of use of the apparatus as well as an electrical apparatus, (PGPUB-DOCUMENT-NUMBER: 20010007971) 12 July 2001, see page 2 of 18.	1-29
A, E	FOSS ET AL, Vehicle leasing and customer credit rehabilitation system and method, (PGPUB-DOCUMENT-NUMBER: 20010034700), 25 October 2001, see the abstract, the summary, claim 23.	1-29
A, E	CHAVES, Motor vehicle dealer e-tailing, (PGPUB-DOCUMENT-NUMBER: 20010044769), 22 November 2001, see the whole publication.	1-29
A, E	SHEETS, System for matching customers with products in inventory, (PGPUB-DOCUMENT-NUMBER: 20010049653), 06 December 2001, see pages 5, 7, 10 of 13).	1-29
A, E	CHAVES, On-line motor vehicle sales, (PGPUB-DOCUMENT-NUMBER: 20020020643), 24 JANUARY 2002, see pages 4-13 of 16.	1-29

B. FIELDS SEARCHED
Documentation other than minimum documentation that are included in the fields searched:

Downes et al., Finance and Investment terms Dictionary, Barron's Financial Guides, 5th edition, 1998
Microsoft Press, Computer Dictionary, 3rd edition, 1997.

B. FIELDS SEARCHED
Electronic data bases consulted (Name of data base and where practicable terms used):

WEST2.0/DERWENT, DIALOG CLASSIC WEB (TM), CORPORATE RESOURCENET, PROQUEST DIRECT
search terms: automobile, car, trade, match, bidding, vehicle, appraisal, value, evaluate, condition or state, information,
filing date <= 20000321